



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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Frank O'Bannon
Governor

Lori F. Kaplan
Commissioner

100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.in.gov/idem

RE: **RANCH FIBERGLAS 039-16282-00110**
TO: Interested Parties / Applicant **April 4, 2003**
FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision - Approval

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to 326 IAC 2, this approval was effective immediately upon submittal of the application.

If you wish to challenge this decision, IC 4-21.5-3-7 requires that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office Environmental Adjudication, ISTA Building, 150 W. Market Street, Suite 618, Indianapolis, IN 46204, **within eighteen (18) calendar days from the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures



Frank O. Bannon
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Mr. Walter Stankovich, President
Ranch Fiberglas, Inc.
28564 Holiday Place
Elkhart, Indiana 46517

Re: 039-16282-00110
Significant Source Modification to:
Part 70 permit No.:T039-10481-00110

Dear Mr. Stankovich:

Ranch Fiberglas, Inc. was issued a Part 70 operating permit T039-10481-00110 on August 9, 2002 for a fiberglass component manufacturing plant. An application to modify the source was received on October 28, 2002. Pursuant to 326 IAC 2-7-10.5 the following emission units are approved for construction at the source:

- (c) One (1) gel coat booth (identified as EU-01.1), constructed in 2003, having a maximum throughput capacity of 56.7 pounds of gelcoat per hour and 0.78 pounds of hardener per hour. The gel coat booth is equipped with one (1) air-assisted airless gel coat gun. Emissions of particulate matter are controlled by dry filters, which exhaust at stacks A3 and A4.
- (d) One (1) chop booth (identified as EU-01.2), constructed in 2003, equipped with one (1) flowcoater and having a maximum throughput capacity of 386.6 pounds of resin per hour and 5.33 pounds of hardner per hour. Emissions of particulate matter are controlled by dry fileters, which exhaust at stacks B3 and B4.
- (e) One (1) SLI spray paint system (identified as EU-02), constructed in 2003, and having a maximum throughput capacity of 16.5 pounds of basecoat per hour and 35.8 pounds of clearcoat per hour. The paint system consists of:
 - (1) One (1) basecoat booth equipped with two (2) high volume low pressure (HVLP) spray guns, with emissions of particulate matter controlled using dry filters, which exhaust at stack C1.
 - (2) One (1) flash-off area, with emissions exhausted at stack C2a.
 - (3) One (1) clearcoat booth, equipped with one (1) high volume low pressure (HVLP) spray gun, with emissions of particulate matter controlled using dry filters, which exhaust at stack C3.
 - (4) One (1) pre-heater with emissions exhausted at stack C4.
 - (5) One (1) bake oven with emissions exhausted at stack C5.
 - (6) One (1) repair paint booth, equipped with one (1) high volume low pressure (HVLP) spray gun, with emissions exhausted at stack C6.
- (f) One (1) glue application area (identified at EU-04), having a maximum throughput capacity of 37.07 pounds of adhesive per hour, applied using two (2) spray guns, with emissions exhausted at stack H1.

The following construction conditions are applicable to the proposed project:

General Construction Conditions

1. The data and information supplied with the application shall be considered part of this source modification approval. Prior to any proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Quality (OAQ).
2. This approval to construct does not relieve the permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.
3. Effective Date of the Permit
Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.
4. Pursuant to 326 IAC 2-1.1-9 and 326 IAC 2-7-10.5(i), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.
5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.
6. Pursuant to 326 IAC 2-7-10.5(l) the emission units constructed under this approval shall not be placed into operation prior to revision of the source's Part 70 Operating Permit to incorporate the required operation conditions.

The significant source modification authorizes construction of the new emission units. Operating conditions shall be incorporated into the Part 70 operating permit as a significant permit modification in accordance with 326 IAC 2-7-10.5(l)(2) and 326 IAC 2-7-12. Operation is not approved until the significant permit modification has been issued.

Pursuant to Contract No. A305-0-00-36, IDEM, OAQ has assigned the processing of this application to Eastern Research Group, Inc., (ERG). Therefore, questions should be directed to Amanda Baynham, ERG, 1600 Perimeter Park Drive, Morrisville, North Carolina 27560, or call (919) 468-7910 to speak directly to Ms. Baynham. Questions may also be directed to Duane Van Laningham at IDEM, OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call (800) 451-6027, press 0 and ask for Duane Van Laningham, or extension 3-6878, or dial (317) 233-6878.

Sincerely,
Original signed by

Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

ERG/AAB

cc: File - Elkhart County
Elkhart County Health Department
Northern Regional Office
Air Compliance Section Inspector - Tony Pelath
Compliance Data Section - Karen Nowak
Administrative and Development -Sara Cloe
Technical Support and Modeling - Michele Boner



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PART 70 OPERATING PERMIT OFFICE OF AIR QUALITY

**Ranch Fiberglas, Inc.
28564 Holiday Place
Elkhart, Indiana 46517**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T039-10481-00110	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Quality	Issuance Date: August 9, 2000 Expiration Date: August 9, 2005

First Reopening No.: R039-13269-00110, issued January 15, 2002

First Significant Source Modification: 039-16282-00110	Affected Pages: 2 through 17
Issued by: Original signed by Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: April 4, 2003

SECTION A

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates stationary fiberglass component manufacturing plant.

Responsible Official: Walter M. Stankovich
Source Address: 28564 Holiday Place, Elkhart, Indiana 46517
Mailing Address: 28564 Holiday Place, Elkhart, Indiana 46517
SIC Code: 3089
County Location: Elkhart
County Status: Attainment for all criteria pollutants
Source Status: Part 70 Permit Program
Minor Source, PSD Rules
Major Source, Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

- (a) One (1) gel coat booth (identified as EU-A), with two (2) air-assisted airless gel coat guns, identified as Gel-01 and Gel-02, respectively, with a maximum throughput capacity of 56.7 pounds of gel coat per hour and 0.78 pounds of hardener per hour, using dry filters to control particulate matter emissions, and exhausting to two (2) stacks, identified as A1 and A2. (Constructed pre-1970)
- (b) One (1) chop booth (identified as EU-B), with one (1) flow coating spray system, with a maximum throughput capacity of 386.6 pounds of resin per hour and 5.33 pounds of hardener per hour, using dry filters to control particulate matter emissions, and exhausting to two (2) stacks, identified as B1 and B2. (Constructed pre-1970)
- (c) One (1) gel coat booth (identified as EU-01.1), constructed in 2003, having a maximum throughput capacity of 56.7 pounds of gelcoat per hour and 0.78 pounds of hardener per hour. The gel coat booth is equipped with one (1) air-assisted airless gel coat gun. Emissions of particulate matter are controlled by dry filters, which exhaust at stacks A3 and A4.
- (d) One (1) chop booth (identified as EU-01.2), constructed in 2003, equipped with one (1) flowcoater and having a maximum throughput capacity of 386.6 pounds of resin per hour and 5.33 pounds of hardener per hour. Emissions of particulate matter are controlled by dry filters, which exhaust at stacks B3 and B4.
- (e) One (1) SLI spray paint system (identified as EU-02), constructed in 2003, and having a maximum throughput capacity of 16.5 pounds of basecoat per hour and 35.8 pounds of clearcoat per hour. The paint system consists of:

- (1) One (1) basecoat booth equipped with two (2) high volume low pressure (HVLP) spray guns, with emissions of particulate matter controlled using dry filters, which exhaust at stack C1.
- (2) One (1) flash-off area, with emissions exhausted at stack C2a.
- (3) One (1) clearcoat booth, equipped with one (1) high volume low pressure (HVLP) spray gun, with emissions of particulate matter controlled using dry filters, which exhaust at stack C3.
- (4) One (1) pre-heater with emissions exhausted at stack C4.
- (5) One (1) bake oven with emissions exhausted at stack C5.
- (6) One (1) repair paint booth, equipped with one (1) high volume low pressure (HVLP) spray gun, with emissions exhausted at stack C6.
- (f) One (1) glue application area (identified at EU-04), having a maximum throughput capacity of 37.07 pounds of adhesive per hour, applied using two (2) spray guns, with emissions exhausted at stack H1.
- (g) One (1) rail area, with two (2) HVLP spray guns and one (1) flow coating spray system, with a maximum capacity to paint twelve (12) units per hour, using dry filters for overspray control and exhausting to one stack, identified as D1. (Constructed in 1998)
- (h) One (1) mold shop, with five (5) air atomization spray guns, with a maximum capacity to paint four (4) units per month, exhausting to one (1) stack, identified as E1. (Constructed in 1998)
- (i) One (1) 110 gallon methylene chloride cleaning tank, to be used on a quarterly basis for approximately 60 hours each quarter.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)]
[326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million Btu per hour.
- (b) The following VOC and HAP storage tank with capacity less than or equal to 1,000 gallons and annual throughput less than 12,000 gallons.

Two (2) 200 gallon resin mixing tanks, identified as Mix1 and Mix2.
- (c) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.
- (d) The following equipment related to the manufacturing activities not resulting in the emission of HAP's: brazing equipment, cutting torches, soldering equipment, welding equipment:
 - (1) Three (3) tig welders
 - (2) Three (3) stick welders

- (3) Three (3) mig welders
- (e) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (f) Paved and unpaved roads and parking lots with public access.
- (g) Mold release agents using low volatile products (vapor pressure less than or equal to 2 kilopascals measured at 38 degrees C.
- (h) Machining where an aqueous cutting coolant continuously floods the machining interface.
- (i) Application of oils, greases, lubricants or other nonvolatile materials applied as temporary protective coatings.
- (j) Solvent recycling systems with batch capacity less than or equal to 100 gallons.
- (k) Any operation using aqueous solutions containing less than 1% by weight of VOC'S excluding HAP's.
- (l) Trimmers that do not produce fugitive emissions and that are equipped with a dust collection or trim material recovery device such as a bag filter or cyclone.
- (m) Purging of gas lines and vessels that is related to routine maintenance and repair of buildings, structures, or vehicles at the source where air emissions from those activities would not be associated with any production process.
- (n) Blowdown for any of the following: sight glass; compressors; pumps; and cooling tower.
- (o) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatische conveying; and woodworking operations.
 - (1) One (1) fiberglass grinding booth, with a maximum capacity of 150 units per day, with one (1) closed loop baghouse dust collector for particulate matter control, exhausting to one (1) dust collector, identified as DC-1.
- (p) Other activities or categories not previously identified:

Insignificant Thresholds:

Lead (Pb) = 0.6 ton/year or 3.29 lbs/day Carbon Monoxide (CO) = 25 lbs/day
Sulfur Dioxides (SO₂) = 5 lbs/hour or 25 lbs/day Particulate Matter (PM) = 5 lbs/hour or 25 lbs/day
Nitrogen Oxides (NO_x) = 5 lbs/hour or 25 lbs/day Volatile Organic compounds (VOC) = 3 lbs/hour or 15 lbs/day

- (1) One (1) paint mixing room, exhausting to one (1) stack, identified as F1.
- (2) Fifteen (15) paint pumps.
- (3) Miscellaneous hand grinders/buffers/cutter tools that are located outside of the grinding booth and throughout the facility.
- (4) One (1) 6000 gallon resin holding tank, identified as RT1.

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

- (a) One (1) gel coat booth (identified as EU-A), with two (2) air-assisted airless gel coat guns, identified as Gel-01 and Gel-02, respectively, with a maximum throughput capacity 56.7 pounds pf gel coat per hour and 0.78 pounds of hardener per hour, using dry filters to control particulate matter emissions, and exhausting to two (2) stacks, identified as A1 and A2. (Constructed pre-1970)
- (b) One (1) chop booth (identified as EU-B), with one (1) flow coating spray system, with a maximum throughput capacity of 386.6 pounds of resin per hour and 5.33 pounds of hardener per hour, using dry filters to control particulate matter emissions, and exhausting to two (2) stacks, identified as B1 and B2. (Constructed pre-1970)
- (c) One (1) gel coat booth (identified as EU-01.1), constructed in 2003, having a maximum throughput capacity of 56.7 pounds of gelcoat per hour and 0.78 pounds of hardener per hour. The gel coat booth is equipped with one (1) air-assisted airless gel coat gun. Emissions of particulate matter are controlled by dry filters, which exhaust at stacks A3 and A4.
- (d) One (1) chop booth (identified as EU-01.2), constructed in 2003, equipped with one (1) flowcoater and having a maximum throughput capacity of 386.6 pounds of resin per hour and 5.33 pounds of hardner per hour. Emissions of particulate matter are controlled by dry filters, which exhaust at stacks B3 and B4.
- (e) One (1) SLI spray paint system (identified as EU-02), constructed in 2003, and having a maximum throughput capacity of 16.5 pounds of basecoat per hour and 35.8 pounds of clearcoat per hour. The paint system consists of:
 - (1) One (1) basecoat booth equipped with two (2) high volume low pressure (HVLP) spray guns, with emissions of particulate matter controlled using dry filters, which exhaust at stack C1.
 - (2) One (1) flash-off area, with emissions exhausted at stack C2a.
 - (3) One (1) clearcoat booth, equipped with one (1) high volume low pressure (HVLP) spray gun, with emissions of particulate matter controlled using dry filters, which exhaust at stack C3.
 - (4) One (1) pre-heater with emissions exhausted at stack C4.
 - (5) One (1) bake oven with emissions exhausted at stack C5.
 - (6) One (1) repair paint booth, equipped with one (1) high volume low pressure (HVLP) spray gun, with emissions exhausted at stack C6.
- (f) One (1) glue application area (identified at EU-04), having a maximum throughput capacity of 37.07 pounds of adhesive per hour, applied using two (2) spray guns, with emissions exhausted at stack H1.

SECTION D.1 FACILITY OPERATION CONDITIONS (Continued)

Facility Description [326 IAC 2-7-5(15)]

- (g) One (1) rail area, with two (2) HVLP spray guns and one (1) flow coating spray system, with a maximum capacity to paint twelve (12) units per hour, using dry filters for overspray control and exhausting to one stack, identified as D1. (Constructed in 1998)
- (h) One (1) mold shop, with five (5) air atomization spray guns, with a maximum capacity to paint four (4) units per month, exhausting to one (1) stack, identified as E1. (Constructed in 1998)

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 PSD Limit [326 IAC 2-2][40 CFR 52.21]

The VOC emissions from the entire source shall be limited as follows:

- (a) The VOC emissions from the SLI Spray Paint booth (identified as EU-02) and paint touch-up booth shall not exceed sixty (60) tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (b) The VOC emissions from the glue application facility (identified as EU-04) shall not exceed twenty-four (24) tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (c) The VOC emissions from the gelcoat and chop booths (identified as EU-01.1 and EU-01.2) shall not exceed twenty-four (24) tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (d) The VOC emissions from the gelcoat and chop booths (identified as EU-A and EU-B) shall not exceed one hundred and fourteen (114) tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (e) The VOC emissions from the Rail Area and Mold Shop shall not exceed twenty-five (25) tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

These limits are equivalent to 247 tons of VOC per twelve (12) consecutive month period. Therefore, the provisions of 326 IAC 2-2 and 40 CFR 52.21 not applicable.

D.1.2 General Reduction Requirements for New Facilities [326 IAC 8-1-6]

- (a) Pursuant to 326 IAC 8-1-6 (New Facilities - General Reduction Requirements), the SLI Spray Paint System (identified as EU-02) and the existing final touch-up booth shall comply with the following requirements:
 - (1) The amount of VOC used shall not exceed sixty (60) tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
 - (2) Surface coatings applied in the basecoat, clear coat, and paint repair booths shall be applied using high volume low pressure (HVLP) spray guns.

- (3) The VOC content of basecoat paints shall not exceed 6.3 pounds of VOC per gallon of coating as applied.
- (4) The VOC content of clear coat paints shall not exceed 3.7 pounds of VOC per gallon of coating as applied.
- (b) The emissions of volatile organic compounds from the gelcoat and chop booths (identified as EU-01.1 and EU-1.2) shall not exceed twenty-four (24) tons per twelve (12) consecutive month period, with compliance determined at the end of each month. VOC emissions from the gel coats and resins shall be calculated by multiplying the usage of each gel coat and resin by the emission factor provided by the "Unified Emission Factors for Open Molding of Composites", Composites Fabricators Association, April 1999. Compliance with this limit makes 326 IAC 8-1-6 (New Facilities - General Reduction Requirements) not applicable to these gel coat and chop booths.
- (c) The amount of VOC used in the glue application facility (identified as EU-04) shall not exceed twenty-four (24) tons per twelve (12) consecutive month period, with compliance determined at the end of each month. Compliance with this limit makes 326 IAC 8-1-6 (New Facilities - General Reduction Requirements) not applicable to the glue application facility.
- (d) Pursuant to CP No. 039-9503-00110, issued July 10, 1998, the input volatile organic compound (VOC) content of coating to the rail area and mold shop shall be less than twenty five (25) tons per twelve (12) consecutive month period, rolled on a monthly basis. This usage limit is required to limit the potential to emit of VOCs to less than twenty five (25) tons per twelve (12) consecutive month period. Compliance with this limit makes 326 IAC 8-1-6, not applicable.

D.1.3 Cold Cleaner Operation [326 IAC 8-3-2]

The owner or operator of a cold cleaning facility shall:

- (a) Equip the cleaner with a cover;
- (b) Equip the cleaner with a facility for draining cleaned parts;
- (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) Provide a permanent, conspicuous label summarizing the operating requirements;
- (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

D.1.4 Particulate Matter (PM) [40 CFR 52, Subpart P]

Pursuant to 40 CFR 52, Subpart P, the particulate matter (PM) emissions from the gel coat booth, chop booth, paint booth, clear coat booth, rail area, mold shop, and glue application area shall be limited by the following:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour and

P = process weight rate in tons per hour

D.1.5 Emissions Standards for Reinforced Plastics Composites Fabricating [326 IAC 20-25-3]

Pursuant to 326 IAC 20-25-3, the gelcoat and chop booths shall comply with the following conditions:

- (a) The total HAP monomer content of the following materials shall be limited based on the application method used and the products produced as specified in the following table:

Fiber Reinforced Plastics Composites Products	HAP Monomer Content (Weight %)
Resin, Manual or Mechanical Application	
Production-Speciality Products	48*
Production-Noncorrosion Resistant Unfilled	35*
Production-Noncorrosion Resistant Filled (greater than or equal to 35% by weight)	38
Production, Noncorrosion Resistant, Applied to Thermoformed Thermoplastic Sheet	42
Production, Class I, Flame and Smoke	60*
Shrinkage Controlled	52
Tooling	43
Gel Coat Application	
Production-Pigmented	37
Clear Production	44
Tooling	45
Production-Pigmented, subject to ANSI ^a Standards	45
Production-Clear, subject to ANSI ^a standards	50

a - American National Standards Institute.

* - Categories that must use mechanical nonatomized application technology or manual as stated in subsection (c).

Compliance with these HAP monomer content limits shall be demonstrated on a monthly basis. If all of the resins and gel coats used during a month meet the specified HAP monomer content limits, then maintaining records of content is sufficient for demonstrating compliance with the HAP monomer content limits.

Compliance with the limitations contained in this condition may be demonstrated using monthly emission averaging within each resin or gel coat application category listed in subsection (b) by the use of resins or gel coats with HAP monomer contents lower than the limits specified, and/or additional emission reduction techniques approved by IDEM, OAQ.

Examples of emission reduction techniques include, but are not limited to, using nonatomized application to apply resins or gel coats within a category that does not require nonatomized application, lower monomer content resins and gel coats, vapor suppression, vacuum bagging, or installing a control device. This is allowed to meet the HAP monomer content limits for resin and gel coats within each category, and shall be calculated on an equivalent emissions mass basis monthly to demonstrate compliance as shown below:

For averaging within a category

$$\sum E_{m_A} \leq \sum (M_R * E_a)$$

Where:

M_R	=	Total monthly mass of material within each category (tons).
E_a	=	Emission factor for each material based on allowable monomer content and allowable application method for each category (lbs of monomer per ton of resin or gel coat applied).
E_{m_A}	=	Actual monthly emissions from all materials used within a category based on material specific emission factors, emission reduction techniques and emission controls (lbs of monomer).

Note: Fillers may not be used when averaging.

(b) The following categories of materials in subsection (a) shall be applied using mechanical nonatomized application technology or manual application:

- (1) Production noncorrosion resistant, unfilled resins from all sources.
- (2) Production, speciality product resins from all sources.
- (3) Tooling resins used in the manufacture of watercraft.
- (4) Production resin used for Class I flame and smoke products.

Nonatomized application equipment means the devices where resin or gel coat material does any of the following:

- (1) Flows from the applicator, in a steady state in a observable coherent flow, without droplets, for a minimum distance of three (3) inches from the applicator orifices such as flow coaters, flow choppers, and fluid impingement equipment.
- (2) Is mechanically dispensed within or on to a paint roller applicator such as pressure fed rollers.
- (3) Is deposited on fiber reinforcement moving through a resin or gel coat bath such as resin impregnators.

Nonatomized spray application technology includes flow coaters, flow choppers, pressure-fed rollers, fluid impingement, or other non-spray applications of a design and specifications approved by IDEM, OAQ.

Filled resins are resins containing greater than or equal to thirty-five percent (35%) by weight inert filler material, such as silica micro-spheres or micro-balloons, added to alter

the density or other physical properties of the resin. The term "inert filler" does not include pigments.

- (c) Unless specified in subsection (b), gel coat application and mechanical application of resins shall be by any of the following spray technologies:
 - (1) Nonatomized application technology.
 - (2) Air-assisted airless.
 - (3) Airless.
 - (4) High volume, low pressure (HVLP).
 - (5) Equivalent emission reduction technologies to subdivisions (2) through (4).
- (d) The following cleaning operation standards for resin and gel coat application equipment shall apply:
 - (1) For routine flushing of resin and gel coat application equipment such as spray guns, flow coaters, brushes, rollers, and squeegees, a cleaning solvent shall contain no HAPs. This emission standard does not apply to solvents used for removing cured resin or gel coat from application equipment.
 - (2) A source must store HAP containing solvents used for removing cured resin or gel coat in containers with covers. The covers must have no visible gaps and must be in place at all times, except when equipment is placed in or removed from the container.
 - (3) Recycled cleaning solvents that contain less than or equal to five percent (5%) HAP by weight are considered to contain no HAP for the purposes of this subsection.

D.1.6 Work Practice Standards for Reinforced Plastics Composites Fabrication [326 IAC 20-25-4]

Pursuant to 326 IAC 20-25-4, the following work practice standards shall be implemented:

- (a) Nonatomizing spray equipment shall not be operated at pressures that atomize the material during the application process.
- (b) Except for mixing containers as described in (g), HAP containing materials shall be kept in a closed container when not in use.
- (c) Solvents sprayed during cleanup and resin changes shall be directed into solvent collection containers.
- (d) Solvent collection containers shall be kept closed when not in use.
- (e) Clean-up rags with solvent shall be stored in closed containers.
- (f) Closed containers shall be used for the storage of the followings:
 - (1) All production and tooling resins that contain HAPs.

- (2) All production and tooling gel coats that contain HAPs.
- (3) Waste resins and gel coats that contain HAPs.
- (4) Cleaning materials, including waste cleaning materials.
- (5) Other materials that contain HAPs.
- (g) All resins and gel coat mixing containers with a capacity equal to or greater than fifty-five (55) gallons must have a cover with no visible gaps in place at all times except when material is being added to or removed from a container, or when mixing or pumping equipment is being placed in or removed from a container.

D.1.7 Operator Training for Reinforced Plastics Composites Fabrication [326 IAC 20-25-8]

Pursuant to 326 IAC 20-25-8, all new and existing personnel, including contract personnel, who are involved in resin and gel coat spraying and spray-like applications (for example those applications that could result in excess emissions if performed improperly) shall be trained according to the following schedule:

- (a) All new personnel shall be trained within fifteen (15) days of hiring.
- (b) All personnel hired before March 7, 2001 shall be trained or evaluated by a supervisor within thirty (30) days of the start of operation.
- (c) To ensure training goals listed in subsection (b) are maintained, all personnel shall be given refresher training annually.
- (d) Personnel who have been trained by another owner or operator subject to 326 IAC 20-25 are exempt from subdivision (a) if written documentation that the employee's training is current is provided by the new employer.
- (e) If the result of an evaluation shows that training is needed, such training shall occur within fifteen (15) days of the evaluation.
- (f) The lesson plans shall cover, for the initial and refresher training, at a minimum, all of the following topics:
 - (1) Appropriate application techniques.
 - (2) Appropriate equipment cleaning procedures.
 - (3) Appropriate equipment setup and adjustment to minimize material usage and overspray.
- (g) The Permittee shall maintain the following training records on site and available for inspection and review:
 - (1) A copy of the current training program.
 - (2) A list of current personnel, by name, that are required to be trained and the dates they were trained and the date of the most recent refresher training. Records of prior training programs and former personnel are not required to be maintained.

D.1.8 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the gel coat booth, chop booth, paint booth, clear coat booth, rail area, and mold shop and any control devices.

Compliance Determination Requirements

D.1.9 Volatile Organic Compounds (VOC)

Compliance with the VOC content and usage limitations contained in Conditions D.1.1 and D.1.2 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

D.1.10 VOC Emissions

Compliance with Conditions D.1.1 and D.1.2 shall be demonstrated within 30 days of the end of each month based on the total volatile organic compound usage for the most recent twelve (12) month period.

D.1.11 Hazardous Air Pollutants (HAP) for Reinforced Plastics Composites Fabrication [326 IAC 20-25]

Pursuant to 326 IAC 20-25, compliance with the HAP monomer content limitations in Condition D.1.2 shall be determined by one of the following:

- (a) The manufacturer's certified product data sheet.
- (b) The manufacturer's material safety data sheet.
- (c) Sampling and analysis, using any of the following test methods, as applicable:
 - (1) 40 CFR 60, Method 24, Appendix A (July 1, 1998), shall be used to measure the total volatile HAP and volatile organic compound (VOC) content of resins and gel coats. Method 24 may be modified for measuring the volatile HAP content of resins or gel coat to require that the procedure be performed on uncatalyzed resin or gel coat samples.
 - (2) 40 CFR 63, Method 311, Appendix A (July 1, 1998), shall be used to measure HAP content in resins and gel coats by direct injection into a gas chromatograph.
- (d) An alternative method that has been approved by IDEM, OAQ.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.12 Particulate [326 IAC 6-3-2(d)]

Pursuant to 326 IAC 6-3-2(d), particulate emissions from the gelcoat booths, chop booths, paint booths, rail area, and mold shop, shall be controlled by dry particulate filters, and the Permittee shall operate the control device in accordance with manufacturer's specifications.

D.1.13 Monitoring

-
- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating booth stacks, while one or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

- (b) Monthly inspections shall be performed of the particulate emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
- (c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.14 Record Keeping Requirements

- (a) To document compliance with Conditions D.1.1 and D.1.2 the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Conditions D.1.1 and D.1.2.
 - (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
 - (2) The cleanup solvent usage for each month;
 - (3) The total VOC usage for each month; and
 - (4) The weight of VOCs emitted for each compliance period.
- (b) To document compliance with Condition D.1.12 and D.1.13, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.15 Record Keeping Requirements for Reinforced Plastics Composites Fabrication [326 IAC 20-25]

- (a) To document compliance with Condition D.1.5, the Permittee shall maintain records that are complete and sufficient to establish compliance with the HAP monomer content limits. Records maintained shall be taken monthly. Examples of such records include by are not limited to:
 - (1) The usage by weight and monomer content of each resin and gel coat used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS), manufacturer's certified product data sheets, and calculations necessary to verify the type, amount used, and HAP content of each resin or gel coat;
 - (2) Method of application and other emission reduction techniques for each resin and gel coat used;

- (3) Monthly calculations demonstrating compliance on an equivalent emissions mass basis if non-compliant resins or gel coats are used during that month.
- (b) To document compliance with Condition D.1.7, the Permittee shall maintain the following records:
 - (1) A copy of the current training program.
 - (2) A list of all current personnel, by name, that are required to be trained and the dates they were trained and the date the most recent refresher training. Records of prior training programs and former personnel are not required to be maintained.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.16 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.1.1 and D.1.2 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

D.1.17 Reporting Requirements for Reinforced Plastics Composites Fabrication [326 IAC 20-25]

If monthly emissions averaging pursuant to 326 IAC 20-25-3(h)(2) and Condition D.1.5(a) are used, the Permittee shall submit a quarterly summary report and supporting calculations pursuant to 326 IAC 20-25-7(c).

SECTION D.2

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

- (i)_ One (1) 110 gallon methylene chloride cleaning tank, to be used on a quarterly basis for approximately 60 hours each quarter.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1 AND 326 IAC 2-7-10.5, WITH CONDITIONS LISTED BELOW.

Construction Conditions

General Construction Conditions

- D.2.1 This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

Effective Date of the Permit

- D.2.2 Pursuant to IC 13-15-5-3, this section of this permit becomes effective upon its issuance.

Operation Conditions

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.3 General Provisions Relating to HAPs [326 IAC 20-1-1][40 CFR Part 63, Subpart A]

The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the facility described in this section except when otherwise specified in 40 CFR Part 63, Subpart T.

D.2.4 Halogenated Solvent Cleaning NESHAP [326 IAC 20-6-1][40 CFR Part 63, Subpart T]

This facility is subject to 40 CFR Part 63, Subpart T, which is incorporated by reference as 326 IAC 20-6-1. A copy of the rule is attached.

- (a) The Permittee shall employ a tightly fitting cover that shall be closed at all times except during parts entry and removal, and a water layer at a minimum thickness of 2.5 centimeters (1.0 inch) on the surface of the solvent within the cleaning machine.

D.2.5 Cold Cleaner Degreaser Operation and Control [326 IAC 8-3-5]

- (a) The owner or operator of a cold cleaning degreaser facility shall ensure that the following control equipment requirements are met:

- (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:

- (A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100 EF);

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Quarterly Report

Source Name: Ranch Fiberglas, Inc.
Source Address: 28564 Holiday Place, Elkhart, Indiana 46517
Mailing Address: 28564 Holiday Place, Elkhart, Indiana 46517
Part 70 Permit No.: T039-10481-00110
Facility: Gel Coat and Chop Booths (identified as EU-A and EU-B)
Parameter: VOC Emissions
Limit: Less than one hundred and fourteen (114) tons per twelve (12) consecutive month period with compliance determined at the end of each month

YEAR: _____

Month	VOC Emissions (tons/month)	VOC Emissions Previous 11 Months (tons)	VOC Emissions 12 Month Total (tons)
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Quarterly Report

Source Name: Ranch Fiberglas, Inc.
Source Address: 28564 Holiday Place, Elkhart, Indiana 46517
Mailing Address: 28564 Holiday Place, Elkhart, Indiana 46517
Part 70 Permit No.: T039-10481-00110
Facility: Rail area and Mold shop
Parameter: VOC Emissions
Limit: Less than 25 per twelve (12) consecutive month period with compliance determined at the end of each month

YEAR: _____

Month	VOC Emissions (tons/month)	VOC Emissions Previous 11 Months (tons)	VOC Emissions 12 Month Total (tons)
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

April 4, 2003

**Indiana Department of Environmental Management
Office of Air Quality**

**Addendum to the Technical Support Document (TSD)
for a Part 70 Significant Source Modification and a
Part 70 Significant Permit Modification**

Source Background and Description

Source Name:	Ranch Fiberglas, Inc.
Source Location:	28564 Holiday Place, Elkhart, Indiana 46517
County:	Elkhart
SIC Code:	3089
Operation Permit No.:	T039-10481-00110
Operation Permit Issuance Date:	August 9, 2000
Significant Source Modification No.:	039-16282-00110
Significant Permit Modification No.:	039-16266-00110
Permit Reviewer:	ERG/AAB

On February 13, 2003, the Office of Air Quality (OAQ) had a notice published in the Elkhart Truth, Elkhart, Indiana, stating that Ranch Fiberglas, Inc., had applied for a Significant Source Modification and a Significant Permit Modification to their existing source. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On March 4, 2003, Ranch Fiberglas, Inc. submitted comments on the proposed Significant Source Modification and Significant Permit Modification. The summary of the comments is as follows:

Comment 1:

Condition A.1 should list the source as a "Minor Source, PSD Rules" based on supporting information in the TSD.

Response to Comment 1:

IDEM, OAQ agrees that the source is a minor source under the PSD regulations in 326 IAC 2-2 and 40 CFR 52.21. The following changes have been made to the permit:

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates stationary fiberglass component manufacturing plant.

Responsible Official: Walter M. Stankovich
Source Address: 28564 Holiday Place, Elkhart, Indiana 46517
Mailing Address: 28564 Holiday Place, Elkhart, Indiana 46517
SIC Code: 3089
County Location: Elkhart
County Status: Attainment for all criteria pollutants
Source Status: Part 70 Permit Program
~~Major~~ **Minor** Source, PSD Rules
Major Source, Section 112 of the Clean Air Act

Comment 2:

Condition A.3(b)(2) describes one 6,000 gallon resin holding tank (identified as RT1). However, this storage tank does not fit the description of a storage tank with capacity less than 1,000 gallons and annual throughput less than 12,000 gallons. Although the tank does not fit this definition, the emissions would make the tank an insignificant activity.

Response to Comment 2:

IDEM, OAQ agrees that the storage tank RT1 was incorrectly listed in Condition A.3(b)(2) in the original permit. IDEM, OAQ has revised Condition A.3 as follows:

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

(b) The following VOC and HAP storage ~~containers~~: ~~Storage tanks~~ with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons:

~~(1) Two (2) 200 gallon resin mixing tanks, identified as Mix1 and Mix2.~~

~~(2) One (1) 6000 gallon resin holding tank, identified as RT1.~~

(p) Other activities or categories not previously identified:

Insignificant Thresholds:

Lead (Pb) = 0.6 ton/year or 3.29 lbs/day Carbon Monoxide (CO) = 25 lbs/day

Sulfur Dioxides (SO₂) = 5 lbs/hour or 25 lbs/day Particulate Matter (PM) = 5 lbs/hour or 25 lbs/day

Nitrogen Oxides (NO_x) = 5 lbs/hour or 25 lbs/day Volatile Organic compounds (VOC) = 3 lbs/hour or 15 lbs/day

(1) One (1) paint mixing room, exhausting to one (1) stack, identified as F1.

(2) Fifteen (15) paint pumps.

(3) Miscellaneous hand grinders/buffers/cutter tools that are located outside of the grinding booth and throughout the facility.

(4) One (1) 6000 gallon resin holding tank, identified as RT1.

Comment 3:

Condition D.1.7(e) should have an "s" added to the word "show" so the sentence reads "If the result of an evaluation shows that training is needed, such training shall occur within fifteen (15) days of the evaluation."

Response to Comment 3:

IDEM, OAQ has corrected the language in Condition D.1.7(e) as follows:

D.1.7 Operator Training for Reinforced Plastics Composites Fabrication [326 IAC 20-25-8]

- (e) If the result of an evaluation shows that training is needed, such training shall occur within fifteen (15) days of the evaluation.

Comment 4:

Since 326 IAC 1-6-3, Preventative maintenance plans, requires preventive maintenance plans only for the "emission control devices" of a facility, Ranch requested the language in Condition D.1.8 be changed as follows:

"A Preventative Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for any control devices associated with the gel coat booth, chop booth, paint booth, clear coat booth, rail area, and mold shop."

Response to Comment 4:

The Preventive Maintenance Plan applies to both emission units and control devices. As indicated in 326 IAC 1-6-4, owners and operators are responsible for operating and maintaining process equipment in compliance with all applicable rules. The Preventative Maintenance Plan is required for emission units because lack of proper maintenance of an emission unit may cause or contribute to a violation of an emission limitation or other regulation even when an emission unit is equipped with a control device. Hence, the Preventative Maintenance Plan is required for the facilities described in Section D.1 as well as the control devices. No changes have been made to the permit as a result of this comment.

Comment 5:

Condition D.1.12, Particulate as written, includes the requirement for dry particulate filters for the glue application area. Ranch contends that this type of operation does not have the potential to emit particulate from the glue application due to the stringy nature of the glue as it is sprayed from the gun. Ranch has requested that this condition be revised as follows:

"Pursuant to 326 IAC 6-3-2(d), particulate emissions from the gelcoat booths, chop booths, paint booths, rail area, mold shop, and glue application area shall be controlled by dry particulate filters, and the Permittee shall operate the control device in accordance with manufacturer's specifications. **Compliance with this condition shall include only surface coatings that emit or have the potential to emit particulate and does not include surface coatings applied using dip, roll, flow, or brush coatings; and applications of aerosol coating products to repair minor surface damage and imperfections.**"

Response to Comment 5:

Since the spray application of glues and adhesives has the potential to emit particulate, the glue application area at this source is subject to the requirements of 326 IAC 6-3-2(d). OAQ has determined for glueing operations that the application methodology will be equivalent control for particulates. Condition D.1.12 has been changed as follows:

D.1.12 Particulate [326 IAC 6-3-2(d)]

Pursuant to 326 IAC 6-3-2(d), particulate emissions from the gelcoat booths, chop booths, paint booths, rail area, **and** mold shop, ~~and glue application area~~, shall be controlled by dry particulate filters, and the Permittee shall operate the control device in accordance with manufacturer's specifications.

Comment 6:

The following conditions refer to VOC "used" or VOC "input" instead of VOC "emissions" as is stated elsewhere in this permit: D.1.2(a)(1), D.1.2(c), and D.1.2(d). Also, the related Quarterly Report forms refer to "input" VOC instead of VOC "emissions" as the parameter being monitored. Since the underlying rule, 326 IAC 8-1-6, refers to "emissions," Ranch requested the references to VOC "used" or VOC "input" in the above cited conditions be changed to refer to VOC "emissions." Ranch also requested the Quarterly Report forms be changed as well to refer to VOC "emissions."

Response to Comment 6:

Since the amount of VOC used in the SLI Spray Paint System, final touch-up booth, glue application facility, rail area, and mold shop is directly proportional to the amount of VOC emissions from these facilities, the reference to the "amount of VOC used" and "VOC input" are appropriate in this context. Therefore, no changes to the permit have been made as a result of this comment. However, IDEM, OAQ has revised the reporting forms for the Gel Coat and Chop Booths (EU-A, EU-B, EU-01.1, and EU-01.2) because the VOC emissions from these processes are calculated using the VOC content of the materials applied and the emission factors provided by the "Unified Emission Factors for Open Molding of Composites," Composites Fabricators Association, April 1999. The reporting forms have been corrected as shown below:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Quarterly Report

Source Name: Ranch Fiberglas, Inc.
Source Address: 28564 Holiday Place, Elkhart, Indiana 46517
Mailing Address: 28564 Holiday Place, Elkhart, Indiana 46517
Part 70 Permit No.: T039-10481-00110
Facility: Gel Coat and Chop Booths (identified as EU-A and EU-B)
Parameter: ~~Input~~ VOC **Emissions**
Limit: Less than one hundred and fourteen (114) tons per twelve (12) consecutive month period with compliance determined at the end of each month

YEAR: _____

Month	VOC Usage /Emissions (tons/month)	VOC Usage /Emissions Previous 11 Months (tons)	VOC Usage /Emissions 12 Month Total (tons)
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Quarterly Report

Source Name: Ranch Fiberglas, Inc.
Source Address: 28564 Holiday Place, Elkhart, Indiana 46517
Mailing Address: 28564 Holiday Place, Elkhart, Indiana 46517
Part 70 Permit No.: T039-10481-00110
Facility: Gel Coat and Chop Booths (identified as EU-01.1 and EU-01.2)
Parameter: ~~Input~~ VOC Emissions
Limit: Less than twenty four (24) tons per twelve (12) consecutive month period with compliance determined at the end of each month

YEAR: _____

Month	VOC Usage /Emissions (tons/month)	VOC Usage /Emissions Previous 11 Months (tons)	VOC Usage /Emissions 12 Month Total (tons)
Month 1			
Month 2			
Month 3			

- 9 No deviation occurred in this quarter.
- 9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Comment 7:

Paragraph (1) on page 2 of 35 in the Technical Support Document references a unit rate of 7.5 units per hour. This should be changed to 7.4 units per hour to be consistent with the unit rates cited elsewhere in the permit.

Response to Comment 7:

IDEM, OAQ agrees that the maximum throughput rate in paragraph (1) on page 2 of the Technical Support Document was incorrectly stated as 7.5 units per hour instead of the correct 7.4 units per hour. No changes have been made to the TSD because IDEM, OAQ prefers that the Technical Support Document reflect the permit that was on public notice. This Addendum to the Technical Support Document accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision. No changes have been made to the permit as a result of this comment.

Upon further review, the OAQ has decided to make the following revision to the permit (bolded language has been added, the language with a line through it has been deleted).

The 110 gallon methylene chloride cleaning tank was listed in Sections D.1 and D.2 of the original permit. This unit should have been listed only in Section D.2. The following changes have been made to the permit.

SECTION D.1 FACILITY OPERATION CONDITIONS (Continued)

Facility Description [326 IAC 2-7-5(15)]

- (g) One (1) rail area, with two (2) HVLP spray guns and one (1) flow coating spray system, with a maximum capacity to paint twelve (12) units per hour, using dry filters for overspray control and exhausting to one stack, identified as D1. (Constructed in 1998)
- (h) One (1) mold shop, with five (5) air atomization spray guns, with a maximum capacity to paint four (4) units per month, exhausting to one (1) stack, identified as E1. (Constructed in 1998)
- (i) ~~One (1) 110 gallon methylene chloride cleaning tank, to be used on a quarterly basis for approximately 60 hours each quarter.~~

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)] Insignificant Activities:

- (i) One (1) 110 gallon methylene chloride cleaning tank, to be used on a quarterly basis for approximately 60 hours each quarter.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

April 4, 2003

**Indiana Department of Environmental Management
Office of Air Quality**

**Technical Support Document (TSD) for a
Part 70 Significant Source Modification
and a
Part 70 Significant Permit Modification**

Source Background and Description

Source Name:	Ranch Fiberglas, Inc.
Source Location:	28564 Holiday Place, Elkhart, Indiana 46517
County:	Elkhart
SIC Code:	3089
Operation Permit No.:	T039-10481-00110
Operation Permit Issuance Date:	August 9, 2000
Significant Source Modification No.:	039-16282-00110
Significant Permit Modification No.:	039-16266-00110
Permit Reviewer:	ERG/AAB

The Office of Air Quality (OAQ) has reviewed a modification application from Ranch Fiberglas, Inc., relating to the construction and operation of the following new emission units and pollution control devices:

- (c) One (1) gel coat booth (identified as EU-01.1), constructed in 2003, having a maximum throughput capacity of 56.7 pounds of gelcoat per hour and 0.78 pounds of hardener per hour. The gel coat booth is equipped with one (1) air-assisted airless gel coat gun. Emissions of particulate matter are controlled by dry filters, which exhaust at stacks A3 and A4.
- (d) One (1) chop booth (identified as EU-01.2), constructed in 2003, equipped with one (1) flowcoater and having a maximum throughput capacity of 386.6 pounds of resin per hour and 5.33 pounds of hardener per hour. Emissions of particulate matter are controlled by dry filters, which exhaust at stacks B3 and B4.
- (e) One (1) SLI spray paint system (identified as EU-02), constructed in 2003, and having a maximum throughput capacity of 16.5 pounds of basecoat per hour and 35.8 pounds of clearcoat per hour. The paint system consists of:
 - (1) One (1) basecoat booth equipped with two (2) high volume low pressure (HVLV) spray guns, with emissions of particulate matter controlled using dry filters, which exhaust at stack C1.
 - (2) One (1) flash-off area, with emissions exhausted at stack C2a..

- (3) One (1) clearcoat booth, equipped with one (1) high volume low pressure (HVLP) spray gun, with emissions of particulate matter controlled using dry filters, which exhaust at stack C3.
- (4) One (1) pre-heater with emissions exhausted at stack C4.
- (5) One (1) bake oven with emissions exhausted at stack C5.
- (6) One (1) repair paint booth, equipped with one (1) high volume low pressure (HVLP) spray gun, with emissions exhausted at stack C6.
- (f) One (1) glue application area (identified at EU-04), having a maximum throughput capacity of 37.07 pounds of adhesive per hour, applied using two (2) spray guns, with emissions exhausted at stack H1.

In addition to the new construction, Ranch Fiberglas, Inc. has also requested the following administrative changes to their Title V permit:

- (1) The existing gel coat booth and chop booth were incorrectly described a Condition A.2(a) and (b) as having maximum throughput capacities of 40 units per hour. Based on information provided by the source, the correct throughput for these booths has always been 7.5 units per hour. This is equivalent to 56.7 pounds of gelcoat and 0.78 pounds of hardner per hour for the gelcoat booth, and 386.6 pounds of resin and 5.33 pounds of hardner per hour for the chop booth. Since no physical or operational changes have been made to these booths, this correction represents an administrative change to the permit.
- (2) Condition D.1.2 in the Title V permit included compliance requirements for 326 IAC 2-4.1 (New Source Toxics Control). Ranch Fiberglas has requested this condition be removed from their Title V permit because this rule is not applicable to the rail area and mold shop. 326 IAC 2-4.1 applies to the construction or reconstruction of a major source of hazardous air pollutants after July 27, 1997. Although the rail area and mold shop were constructed in 1998, they were added to an existing process line, which consisted of the gel coat booth, chop booth, spray painting and finishing operations that were constructed prior to 1970. Neither the rail area or the mold shop produce an intermediate or final product. For these reasons, IDEM, OAQ has deleted Condition D.1.2 from the Title V permit.

History

On October 28, 2002, Ranch Fiberglas, Inc., submitted an application to the OAQ requesting to add two additional fiberglass booths, to replace existing paint booths and to expand the glue application area at their existing Elkhart plant. In addition to these changes, Ranch Fiberglas plans to add exhaust stacks to the mold shop, preparation areas, assembly area, and final touchup area. The glue application was previously listed as an insignificant activity in which water based adhesives were used that contained less than or equal to 5% by volume VOCs (excluding HAPs).

Justification for Modification

The Part 70 Operating permit is being modified through a Part 70 Significant Source Modification and Significant Permit Modification. This source modification is being performed pursuant to 326 IAC 2-7-10.5(f)(2) and (b), because the modification is subject to 326 IAC 8-1-6 and the potential to emit HAPs is greater than 10 tons per year for a single HAP and greater than 25 tons per year for any combination of HAPs. The permit modification is being performed pursuant to 326 IAC 2-7-12(d), because the source has requested IDEM, OAQ to include limitations on the VOC emissions

such that the VOC emissions from the entire source will be less than the 250 tons per year threshold for 326 IAC 2-2 (PSD) and 40 CFR 52.21.

Existing Approvals

The source was issued a Part 70 Operating Permit T039-10481-00110 on August 9, 2000. The source has since received the following:

- (a) First Reopening No.: 039-13289, issued on January 15, 2002.

Enforcement Issue

There are no enforcement actions pending.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
A3	Gel Coat Booth (EU-01.1)	24	2.5	8,395	Ambient
A4	Gel Coat Booth (EU-01.1)	24	2.5	8,395	Ambient
B3	Chop Booth (EU-01.2)	24	3	11,430	Ambient
B4	Chop Booth (EU-01.2)	24	3	11,430	Ambient
C1	SLI Paint Booth (EU-02)	24	3.5	25,900	Ambient
C2a	SLI Paint Booth (EU-02)	24	1	1,429	110
C3	SLI Paint Booth (EU-02)	24	3.5	25,900	Ambient
C4	SLI Paint Booth (EU-02)	24	1	1,429	110
C5	SLI Paint Booth (EU-02)	24	1.5	3,112	140
C6	SLI Paint Booth (EU-02)	24	1	1,429	Ambient
E2	Mold Shop Exhaust (EU-01.4)	2	2	5,800	Ambient
K1	Preparation Area 1	2	2.5	8,395	Ambient
G1	Preparation Area 2	2	2.5	8,395	Ambient
H1	Glue Process and Assembly Area (EU-04)	2	2	5,800	Ambient
J1	Final Touchup Area	2	2	5,800	Ambient

Recommendation

The staff recommends to the Commissioner that the Part 70 Significant Source Modification and Significant Permit Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on October 28, 2002. Additional information was received on November 11, 2002 and November 27, 2002.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (Appendix A, pages 1 through 7).

Potential To Emit of Modification

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA.”

Pollutant	Potential To Emit (tons/year)
PM	130
PM-10	130
SO ₂	0.00
VOC	394.9
CO	0.00
NO _x	0.00

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP's	Potential To Emit (tons/year)
Hexane	21.1
Toluene	50.1
Xylene	38.0
Styrene	112.5
Ethylbenzene	0.11
Methyl Ethyl Ketone	0.66
TOTAL	222.5

- (a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of PM10 and VOC are equal to or greater than 100 tons per year. Therefore, the modification is subject to the provisions of 326 IAC 2-7-10.5(f).
- (b) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of any single HAP is equal to or greater than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination HAPs is greater than or equal to twenty-five (25) tons per year. Therefore, the modification is subject to the provision of 326 IAC 2-7-10.5(f).
- (c) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Potential to Emit of the Existing Source

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA.”

Pollutant	Potential to Emit (tons/year)
PM-10	Greater than 100
SO ₂	Greater than 100
NO ₂	Less than 100
VOC	Less than 250
CO	Less than 100
Lead	Less than 100

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAPs	Potential to Emit (tons/year)
Methyl Ethyl Keytone	0.44
Xylene	4.45
Toluene	2.13
Methyl Methylacrylate	0.05
Ethyl Benzene	1.28
Glycol Ether	1.72
Hexamethylene Disocyanate	0.03
Methyl Isobutyl Ketone	3.61
Styrene	33.38
Formaldehyde	0.0002
Dimethyl Phthalate	3.21
Hydroquinone	0.03
Methanol	0.13
Total	50.5

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

- (a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of PM10, and VOC are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of any single HAP is equal to or greater than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination HAPs is greater than or equal to twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (c) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive emissions are not counted toward determination of PSD and Emission Offset applicability.

Actual Emissions

The following table shows the actual emissions from the source.

Pollutant	1997	1998	1999	2000
PM	0.01	0.49	0.08	0.42
PM-10	0.01	0.49	0.08	0.42
SO ₂	0.07	0.01	0.01	0.01
VOC	49.44	49.47	14.87	42.75

CO	2.21	0.10	1.2	0.9
NOx	11.07	2.8	3.5	2.5

Potential To Emit of the Modification After Issuance

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units.

Process/facility	Potential to Emit (tons/year)						
	PM	PM-10	SO ₂	VOC	CO	NO _x	HAPs
New Gelcoat Booth EU-01.1 and New Chop Booth EU-01.2	85.6	85.6	0.00	Less than 24	0.00	0.00	113.96
New SLI Spray Paint System EU-02	36.4	36.4	0.00	Less than 60	0.00	0.00	38.9
Expanded Glue Application Facility	8.10	8.10	0.00	Less than 24	0.00	0.00	69.8
Existing Gelcoat and Chop Booths	85.6	85.6	0.00	113.96	0.00	0.00	113.96
Existing Rail Area and Mold Shop	0.00	0.00	0.00	Less than 25	0.00	0.00	Less than 10 tons for a single HAP and Less than 25 tons for a combination of HAPs
Insignificant Activities	--	--	--	Less than 3.0	--	--	--
Total Emissions	215.7	215.7	--	Less than 247	--	--	361.6*

-- Emissions of the specified pollutant are negligible.

* - The actual HAP emissions will be considerably less than the total shown in this table, because the majority of the HAPs emitted are also VOC and the VOC emissions from most of the processes have been limited.

County Attainment Status

The source is located in Elkhart County.

Pollutant	Status
PM-10	Attainment
SO ₂	Attainment
NO ₂	Attainment
Ozone	Maintenance
CO	Attainment
Lead	Attainment

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Elkhart County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Elkhart County has been classified as attainment or unclassifiable for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Federal Rule Applicability

- (a) This significant modification does not involve a pollutant-specific emissions unit:
 - (1) with the potential to emit before controls equal to or greater than one hundred (100) tons per year, and
 - (2) that is subject to an emission limit and has a control device that is necessary to meet that limit.

Therefore, the requirements of 40 CFR Part 64, Compliance Assurance Monitoring, are not applicable.

- (b) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this modification.
- (c) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this modification.

Based on a review of the proposed rule, IDEM, OAQ believes that the gel coat and resin booths will be subject to the NESHAP 40 CFR 63, Subpart WWWW - National Emission Standards for Hazardous Air Pollutants: Reinforced Plastic Composites Production. This NESHAP was proposed on August 2, 2001. No date has been set for promulgation of this rule.

State Rule Applicability - Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration)

This source is not in one of the twenty-eight listed source categories. Based on a review of the source's previous permits and new PTE emission calculations provided by the source, the potential to emit VOC is currently less than 250 tons per year. The proposed modification will increase the potential to emit VOC to greater than 250 tons per year. However, the source has agreed to limit the VOC emissions from the entire source to less than 250 tons per year. This limit will enable the source to be considered a minor source under 326 IAC 2-2 (PSD) and 40 CFR 52.21. The following conditions have been included in the permit:

The VOC emissions from the entire source shall be limited as follows:

- (a) The VOC emissions from the SLI Spray Paint booth (identified as EU-02) and paint touch-up booth shall not exceed sixty (60) tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (b) The VOC emissions from the glue application facility (identified as EU-04) shall not exceed twenty-four (24) tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (c) The VOC emissions from the gelcoat and chop booths (identified as EU-01.1 and EU-01.2) shall not exceed twenty-four (24) tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (d) The VOC emissions from the gelcoat and chop booths (identified as EU-A and EU-B) shall not exceed one hundred and fourteen (114) tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (e) The VOC emissions from the Rail Area and Mold Shop shall not exceed twenty-five (25) tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

These limits are equivalent to 247 tons of VOC per twelve (12) consecutive month period. Therefore, the provisions of 326 IAC 2-2 and 40 CFR 52.21 not applicable.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants)

A source that constructs or reconstructs a major source of hazardous air pollutants (HAPs) after July 27, 1997 is subject to the requirements of 326 IAC 2-4.1. Currently, Ranch Fiberglas, Inc. manufactures truck caps and truck-bed covers (lids) using existing emission units constructed prior to July 27, 1997. The process includes gel coat application, resin application, painting, degreasing, and grinding operations. Although the potential HAP emissions are greater than the major thresholds (i.e., greater than 10 tons per year for a single HAP and greater than 25 tons per year for a combination of HAPs), the proposed modification does not trigger 326 IAC 2-4.1 because the modification does not meet the definition of a reconstruction provided in 40 CFR 63.41. The term reconstruction is defined in this rule as follows:

“the replacement of components at an existing process or production unit that in and of itself emits or has that potential to emit 10 tons per year of any HAP or 25 tons per year of any combination of HAP, whenever:

- (a) The fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable process or production unit; and
- (b) It is technically and economically feasible for the reconstructed major source to meet the applicable maximum achievable control technology emission limitation for new sources established under this subpart.”

As illustrated in the following table, the proposed modifications represent less than 50% of the fixed capital cost to replace the existing process.

Emission Units	Fixed Capital Cost (\$)
Lamination and Gelcoat Addition	\$400,000
New SLI Spray Paint Booth	\$375,000
Total Cost of Modification	\$775,000
Replacement Fixed Capital Cost for Existing Process	Estimated at between \$2.1 - \$2.2 million

In addition, the proposed modifications do not represent a new process because they cannot by themselves be used to produce an intermediate or final product. Therefore, the proposed modifications are not subject to the provisions of 326 IAC 2-4.1.

326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Gelcoat and Chop Booths (EU-01.1 and EU-01.2)

326 IAC 6-3-2 (Particulate Emission Limitation)

On June 12, 2002, revisions to the 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes) became effective; this rule was previously referred to as 326 IAC 6-3 (Process Operations). As of the date this permit is being issued these revisions have not been approved by EPA into the Indiana State Implementation Plan (SIP); therefore, the following requirements from the previous version of 326 IAC 6-3 (Process Operations), which has been approved into the SIP will remain applicable requirements until the revisions to 326 IAC 6-3 are approved into the SIP and the condition is modified in a subsequent permit action.

Pursuant to 40 CFR 52 Subpart P, the particulate emissions from the gelcoat and chop booths (identified as EU-01.1 and EU-01.2) shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

Under the rule revision, particulate from the surface coating operations shall be controlled by dry particulate filter or an equivalent control device, and the Permittee shall operate the control device in accordance with the manufacturer's specifications.

326 IAC 8-1-6 (New Facilities - General Reduction Requirements)

These new booths would be subject to 326 IAC 8-1-6 because the units will be constructed after the applicability date of January 1, 1980 and each has potential emissions of volatile organic compounds (VOC) that are greater than twenty-five (25) tons per year. However, Ranch Fiberglass, Inc. has agreed to limit the combined VOC emissions from these facilities to less than twenty-four (24) tons per twelve (12) consecutive month period. The following limitation has been included in the proposed permit:

The emissions of volatile organic compounds from the gelcoat and chop booths (identified as EU-01.1 and EU-1.2) shall not exceed twenty-four (24) tons per twelve (12) consecutive month period, with compliance determined at the end of each month. VOC emissions from the gel coats and resins shall be calculated by multiplying the usage of each gel coat and resin by the emission factor provided by the "Unified Emission Factors for Open Molding of Composites", Composites Fabricators Association, April 1999. Compliance with this limit makes 326 IAC 8-1-6 (New Facilities - General Reduction Requirements) not applicable to these gel coat and chop booths.

326 IAC 20-25 (Emissions from Reinforced Plastics Composites Fabricating Emission Units)

The new and existing gelcoat and chop booths are subject to 326 IAC 20-25 because:

- (1) They have a potential to emit 10 tons per year of any hazardous air pollutant (HAP) or 25 tons per year of any combination of HAPs and that manufacture;
- (2) They manufacture reinforced plastics composites parts; and
- (3) They have actual emissions of styrene equal to or greater than 3 tons per year.

The following conditions have been included in the proposed permit:

Pursuant to 326 IAC 20-25-3, the gelcoat and chop booths shall comply with the following conditions:

- (a) The total HAP monomer content of the following materials shall be limited based on the application method used and the products produced as specified in the following table:

Fiber Reinforced Plastics Composites Products	HAP Monomer Content (Weight %)
Resin, Manual or Mechanical Application	
Production-Speciality Products	48*
Production-Noncorrosion Resistant Unfilled	35*
Production-Noncorrosion Resistant Filled (greater than or equal to 35% by weight)	38
Production, Noncorrosion Resistant, Applied to Thermoformed Thermoplastic Sheet	42
Production, Class I, Flame and Smoke	60*
Shrinkage Controlled	52
Tooling	43
Gel Coat Application	
Production-Pigmented	37
Clear Production	44
Tooling	45
Production-Pigmented, subject to ANSI ^a Standards	45
Production-Clear, subject to ANSI ^a standards	50

a - American National Standards Institute.

* - Categories that must use mechanical nonatomized application technology or manual as stated in subsection (c).

Compliance with these HAP monomer content limits shall be demonstrated on a monthly basis. If all of the resins and gel coats used during a month meet the specified HAP monomer content limits, then maintaining records of content is sufficient for demonstrating compliance with the HAP monomer content limits.

Compliance with the limitations contained in this condition may be demonstrated using monthly emission averaging within each resin or gel coat application category listed in subsection (b) by the use of resins or gel coats with HAP monomer contents lower than the limits specified, and/or additional emission reduction techniques approved by IDEM, OAQ.

Examples of emission reduction techniques include, but are not limited to, using nonatomized application to apply resins or gel coats within a category that does not require nonatomized application, lower monomer content resins and gel coats, vapor suppression, vacuum bagging, or installing a control device. This is allowed to meet the HAP monomer content limits for resin and

gel coats within each category, and shall be calculated on an equivalent emissions mass basis monthly to demonstrate compliance as shown below:

For averaging within a category

$$\sum E_{m_A} \leq \sum (M_R * E_a)$$

Where:

M_R	=	Total monthly mass of material within each category (tons).
E_a	=	Emission factor for each material based on allowable monomer content and allowable application method for each category (lbs of monomer per ton of resin or gel coat applied).
E_{m_A}	=	Actual monthly emissions from all materials used within a category based on material specific emission factors, emission reduction techniques and emission controls (lbs of monomer).

Note: Fillers may not be used when averaging.

(b) The following categories of materials in subsection (a) shall be applied using mechanical nonatomized application technology or manual application:

- (1) Production noncorrosion resistant, unfilled resins from all sources.
- (2) Production, speciality product resins from all sources.
- (3) Tooling resins used in the manufacture of watercraft.
- (4) Production resin used for Class I flame and smoke products.

Nonatomized application equipment means the devices where resin or gel coat material does any of the following:

- (1) Flows from the applicator, in a steady state in a observable coherent flow, without droplets, for a minimum distance of three (3) inches from the applicator orifices such as flow coaters, flow choppers, and fluid impingement equipment.
- (2) Is mechanically dispensed within or on to a paint roller applicator such as pressure fed rollers.
- (3) Is deposited on fiber reinforcement moving through a resin or gel coat bath such as resin impregnators.

Nonatomized spray application technology includes flow coaters, flow choppers, pressure-fed rollers, fluid impingement, or other non-spray applications of a design and specifications approved by IDEM, OAQ.

Filled resins are resins containing greater than or equal to thirty-five percent (35%) by weight inert filler material, such as silica micro-spheres or micro-balloons, added to alter the density or other physical properties of the resin. The term "inert filler" does not include pigments.

(c) Unless specified in subsection (b), gel coat application and mechanical application of resins shall be by any of the following spray technologies:

- (1) Nonatomized application technology.
 - (2) Air-assisted airless.
 - (3) Airless.
 - (4) High volume, low pressure (HVLP).
 - (5) Equivalent emission reduction technologies to subdivisions (2) through (4).
- (d) The following cleaning operation standards for resin and gel coat application equipment shall apply:
- (1) For routine flushing of resin and gel coat application equipment such as spray guns, flow coaters, brushes, rollers, and squeegees, a cleaning solvent shall contain no HAPs. This emission standard does not apply to solvents used for removing cured resin or gel coat from application equipment.
 - (2) A source must store HAP containing solvents used for removing cured resin or gel coat in containers with covers. The covers must have no visible gaps and must be in place at all times, except when equipment is placed in or removed from the container.
 - (3) Recycled cleaning solvents that contain less than or equal to five percent (5%) HAP by weight are considered to contain no HAP for the purposes of this subsection.

Pursuant to 326 IAC 20-25-4, the following work practice standards shall be implemented:

- (a) Nonatomizing spray equipment shall not be operated at pressures that atomize the material during the application process.
- (b) Except for mixing containers as described in (g), HAP containing materials shall be kept in a closed container when not in use.
- (c) Solvents sprayed during cleanup and resin changes shall be directed into solvent collection containers.
- (d) Solvent collection containers shall be kept closed when not in use.
- (e) Clean-up rags with solvent shall be stored in closed containers.
- (f) Closed containers shall be used for the storage of the followings:
 - (1) All production and tooling resins that contain HAPs.
 - (2) All production and tooling gel coats that contain HAPs.
 - (3) Waste resins and gel coats that contain HAPs.
 - (4) Cleaning materials, including waste cleaning materials.
 - (5) Other materials that contain HAPs.

- (g) All resins and gel coat mixing containers with a capacity equal to or greater than fifty-five (55) gallons must have a cover with no visible gaps in place at all times except when material is being added to or removed from a container, or when mixing or pumping equipment is being placed in or removed from a container.

Pursuant to 326 IAC 20-25-8, all new and existing personnel, including contract personnel, who are involved in resin and gel coat spraying and spray-like applications (for example those applications that could result in excess emissions if performed improperly) shall be trained according to the following schedule:

- (a) All new personnel shall be trained within fifteen (15) days of hiring.
- (b) All personnel hired before March 7, 2001 shall be trained or evaluated by a supervisor within thirty (30) days of the start of operation.
- (c) To ensure training goals listed in subsection (b) are maintained, all personnel shall be given refresher training annually.
- (d) Personnel who have been trained by another owner or operator subject to 326 IAC 20-25 are exempt from subdivision (a) if written documentation that the employee's training is current is provided by the new employer.
- (e) If the result of an evaluation show that training is needed, such training shall occur within fifteen (15) days of the evaluation.
- (f) The lesson plans shall cover, for the initial and refresher training, at a minimum, all of the following topics:
 - (1) Appropriate application techniques.
 - (2) Appropriate equipment cleaning procedures.
 - (3) Appropriate equipment setup and adjustment to minimize material usage and overspray.
- (g) The Permittee shall maintain the following training records on site and available for inspection and review:
 - (1) A copy of the current training program.
 - (2) A list of current personnel, by name, that are required to be trained and the dates they were trained and the date of the most recent refresher training. Records of prior training programs and former personnel are not required to be maintained.

State Rule Applicability - SLI Spray Paint System (EU-02)

326 IAC 6-3-2 (Particulate Emission Limitation)

On June 12, 2002, revisions to the 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes) became effective; this rule was previously referred to as 326 IAC 6-3 (Process Operations). As of the date this permit is being issued these revisions have not been approved by EPA into the Indiana State Implementation Plan (SIP); therefore, the following requirements from the previous version of 326 IAC 6-3 (Process Operations), which has been approved into the SIP will remain applicable requirements until the revisions to 326 IAC 6-3 are approved into the SIP and the condition is modified in a subsequent permit action.

Pursuant to 40 CFR 52 Subpart P, the particulate emissions from the SLI Spray Paint System (identified as EU-02) shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

Under the rule revision, particulate from the surface coating operations shall be controlled by dry particulate filter or an equivalent control device, and the Permittee shall operate the control device in accordance with the manufacturer's specifications.

326 IAC 8-1-6 (New Facilities - General Reduction Requirements)

This new facility is subject to 326 IAC 8-1-6 because the facility will be constructed after the applicability date of January 1, 1980 and has potential emissions of volatile organic compounds (VOC) that are greater than twenty-five (25) tons per year. Pursuant to 326 IAC 8-1-6, Ranch Fiberglass, Inc. submitted a Best Available Control Technology (BACT) Analysis on October 28, 2002. A summary of the BACT analysis is provided in Appendix B. IDEM, OAQ has reviewed the analysis and has agreed that the limitations and work practices proposed by Ranch Fiberglass, Inc. represent BACT for this facility. The following limitation has been included in the permit:

Pursuant to 326 IAC 8-1-6 (New Facilities - General Reduction Requirements), the Permittee shall comply with the following requirements:

- (a) The amount of VOC used in the SLI Spray Paint System (identified as EU-02) and the existing final touch-up booth shall not exceed sixty (60) tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (b) Surface coatings applied in the basecoat, clear coat, and paint repair booths shall be applied using high volume low pressure (HVLP) spray guns.
- (c) The VOC content of basecoat paints shall not exceed 6.3 pounds of VOC per gallon of coating as applied.
- (d) The VOC content of clear coat paints shall not exceed 3.7 pounds of VOC per gallon of coating as applied.

State Rule Applicability - Glue Application Facility (EU-04)

326 IAC 6-3-2 (Particulate Emission Limitation)

On June 12, 2002, revisions to the 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes) became effective; this rule was previously referred to as 326 IAC 6-3 (Process Operations). As of the date this permit is being issued these revisions have not been approved by EPA into the Indiana State Implementation Plan (SIP); therefore, the following requirements from the previous version of 326 IAC 6-3 (Process Operations), which has been approved into the SIP will remain applicable requirements until the revisions to 326 IAC 6-3 are approved into the SIP and the condition is modified in a subsequent permit action.

Pursuant to 40 CFR 52 Subpart P, the particulate emissions from the glue application facility (identified as EU-04) shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

Under the rule revision, particulate from the surface coating operations shall be controlled by dry particulate filter or an equivalent control device, and the Permittee shall operate the control device in accordance with the manufacturer's specifications.

326 IAC 8-1-6 (New Facilities - General Reduction Requirements)

This new facility would be subject to 326 IAC 8-1-6 because the facility will be constructed after the applicability date of January 1, 1980 and has potential emissions of volatile organic compounds (VOC) that are greater than twenty-five (25) tons per year. However, Ranch Fiberglass, Inc. has agreed to limit the VOC emissions from this facility to less than twenty-four (24) tons per twelve (12) consecutive month period. The following limitation has been included in the proposed permit:

The amount of VOC used in the glue application facility (identified as EU-04) shall not exceed twenty-four (24) tons per twelve (12) consecutive month period, with compliance determined at the end of each month. Compliance with this limit makes 326 IAC 8-1-6 (New Facilities - General Reduction Requirements) not applicable to the glue application facility.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

Compliance monitoring conditions application to this modification are as follows:

The fiberglass, surface coating, and glue application operations have applicable compliance monitoring conditions as specified below:

- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step.
- (b) Monthly inspections shall be performed of the particulate emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed.

The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step.

These monitoring conditions are necessary because the dry filters used to control particulate emissions from the fiberglass booths, surface coating booths, and glue application areas must operate properly to ensure compliance with 40 CFR 52, Subpart P and 326 IAC 2-7 (Part 70).

Proposed Changes

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

- (1a) One (1) gel coat booth (**identified as EU-A**), with two (2) air-assisted airless gel coat guns, identified as Gel-01 and Gel-02, respectively, ~~each~~ with a maximum throughput capacity of **56.7 pounds of gel coat per hour and 0.78 pounds of hardener per hour**, ~~to coat 40 units per hour~~, using dry filters to control particulate matter emissions, and exhausting to two (2) stacks, identified as A1 and A2. (Constructed pre-1970)
- (2b) One (1) chop booth (**identified as EU-B**), with one (1) flow coating spray system, with a maximum throughput capacity of **386.6 pounds of resin per hour and 5.33 pounds of hardener per hour**, ~~40 units per hour~~, using dry filters to control particulate matter emissions, and exhausting to two (2) stacks, identified as B1 and B2. (Constructed pre-1970)
- (c) One (1) gel coat booth (identified as EU-01.1), constructed in 2003, having a maximum throughput capacity of 56.7 pounds of gelcoat per hour and 0.78 pounds of hardener per hour. The gel coat booth is equipped with one (1) air-assisted airless gel coat gun. Emissions of particulate matter are controlled by dry filters, which exhaust at stacks A3 and A4.
- (d) One (1) chop booth (identified as EU-01.2), constructed in 2003, equipped with one (1) flowcoater and having a maximum throughput capacity of 386.6 pounds of resin per hour and 5.33 pounds of hardener per hour. Emissions of particulate matter are controlled by dry filters, which exhaust at stacks B3 and B4.
- (e) One (1) SLI spray paint system (identified as EU-02), constructed in 2003, and having a maximum throughput capacity of 16.5 pounds of basecoat per hour and 35.8 pounds of clearcoat per hour. The paint system consists of:
 - (1) One (1) basecoat booth equipped with two (2) high volume low pressure (HVLP) spray guns, with emissions of particulate matter controlled using dry filters, which exhaust at stack C1.
 - (2) One (1) flash-off area, with emissions exhausted at stack C2a.
 - (3) One (1) clearcoat booth, equipped with one (1) high volume low pressure (HVLP) spray gun, with emissions of particulate matter controlled using dry filters, which exhaust at stack C3.
 - (4) One (1) pre-heater with emissions exhausted at stack C4.
 - (5) One (1) bake oven with emissions exhausted at stack C5.

- (6) One (1) repair paint booth, equipped with one (1) high volume low pressure (HVLP) spray gun, with emissions exhausted at stack C6.**
- (f) One (1) glue application area (identified at EU-04), having a maximum throughput capacity of 37.07 pounds of adhesive per hour, applied using two (2) spray guns, with emissions exhausted at stack H1.**
- ~~(3) One (1) paint booth with one (1) HVLP spray gun, with a maximum capacity to paint 100 units per hour, using dry filters to control particulate matter emissions, and exhausting to two (2) stacks, identified as C1 and C2. (Constructed in 1991)~~
- ~~(4) One (1) clear coat booth with one (1) HVLP spray gun, with a maximum capacity to paint 100 units per hour, using a waterwash filter to control particulate matter emissions, and exhausting to one (1) stack, identified as C3. (Constructed in 1993)~~
- (5g) One (1) rail area, with ~~one (1)~~ **two (2)** HVLP spray guns and one (1) flow coating spray system, with a maximum capacity to paint twelve (12) units per hour, using dry filters for overspray control and exhausting to one stack, identified as D1. (Constructed in 1998)**
- (6h) One (1) mold shop, with ~~four (4)~~ **five (5)** air atomization spray guns, with a maximum capacity to paint four (4) units per month, exhausting to one (1) stack, identified as E1. (Constructed in 1998)**
- (7i) One (1) 110 gallon methylene chloride cleaning tank, to be used on a quarterly basis for approximately 60 hours each quarter.**

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)]
[326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- (1a)** Natural gas-fired combustion sources with heat input equal to or less than ten (10) million Btu per hour.
- (2b)** The following VOC and HAP storage containers: Storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons.
 - (a1)** Two (2) 200 gallon resin mixing tanks, identified as Mix1 and Mix2.
 - (b2)** One (1) 6000 gallon resin holding tank, identified as RT1.
- (3c)** Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.
- (4d)** The following equipment related to the manufacturing activities not resulting in the emission of HAP's: brazing equipment, cutting torches, soldering equipment, welding equipment:
 - (a1)** Three (3) tig welders
 - (b2)** Three (3) stick welders
 - (c3)** Three (3) mig welders

- (5e) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (6f) Paved and unpaved roads and parking lots with public access.
- (7g) Mold release agents using low volatile products (vapor pressure less than or equal to 2 kilopascals measured at 38 degrees C.
- (8h) Machining where an aqueous cutting coolant continuously floods the machining interface.
- (9i) Application of oils, greases, lubricants or other nonvolatile materials applied as temporary protective coatings.
- (10j) Solvent recycling systems with batch capacity less than or equal to 100 gallons.
- (11k) Any operation using aqueous solutions containing less than 1% by weight of VOC'S excluding HAP's.
- ~~(12) Water based adhesives that are less than or equal to 5% by volume of VOC's excluding HAP's.~~
- ~~(13l)~~ Trimmers that do not produce fugitive emissions and that are equipped with a dust collection or trim material recovery device such as a bag filter or cyclone.
- ~~(14m)~~ Purging of gas lines and vessels that is related to routine maintenance and repair of buildings, structures, or vehicles at the source where air emissions from those activities would not be associated with any production process.
- (15n) Blowdown for any of the following: sight glass; compressors; pumps; and cooling tower.
- ~~(16o)~~ Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatische conveying; and woodworking operations.
 - (a1) One (1) fiberglass grinding booth, with a maximum capacity of 150 units per day, with one (1) closed loop baghouse dust collector for particulate matter control, exhausting to one (1) dust collector, identified as DC-1.
- ~~(17p)~~ Other activities or categories not previously identified:

Insignificant Thresholds:

Lead (Pb) = 0.6 ton/year or 3.29 lbs/day Carbon Monoxide (CO) = 25 lbs/day
Sulfur Dioxides (SO2) = 5 lbs/hour or 25 lbs/day Particulate Matter (PM) = 5 lbs/hour or 25 lbs/day
Nitrogen Oxides (NOX) = 5 lbs/hour or 25 lbs/day Volatile Organic compounds (VOC) = 3 lbs/hour or 15 lbs/day

- (a1) One (1) paint mixing room, exhausting to one (1) stack, identified as F1.
- (b2) Fifteen (15) paint pumps.
- (e3) Miscellaneous hand grinders/buffers/cutter tools that are located outside of the grinding booth and throughout the facility.

SECTION D.1

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

- (1a) One (1) gel coat booth (**identified as EU-A**), with two (2) air-assisted airless gel coat guns, identified as Gel-01 and Gel-02, respectively, **each with a maximum throughput capacity of 56.7 pounds of gel coat per hour and 0.78 pounds of hardener per hour**, ~~to coat 40 units per hour~~, using dry filters to control particulate matter emissions, and exhausting to two (2) stacks, identified as A1 and A2. (Constructed pre-1970)
- (2b) One (1) chop booth (**identified as EU-B**), with one (1) flow coating spray system, with a maximum **throughput capacity of 386.6 pounds of resin per hour and 5.33 pounds of hardener per hour**, ~~40 units per hour~~, using dry filters to control particulate matter emissions, and exhausting to two (2) stacks, identified as B1 and B2. (Constructed pre-1970)
- (c) One (1) gel coat booth (**identified as EU-01.1**), constructed in 2003, having a maximum throughput capacity of 56.7 pounds of gelcoat per hour and 0.78 pounds of hardener per hour. The gel coat booth is equipped with one (1) air-assisted airless gel coat gun. Emissions of particulate matter are controlled by dry filters, which exhaust at stacks A3 and A4.
- (d) One (1) chop booth (**identified as EU-01.2**), constructed in 2003, equipped with one (1) flowcoater and having a maximum throughput capacity of 386.6 pounds of resin per hour and 5.33 pounds of hardner per hour. Emissions of particulate matter are controlled by dry filters, which exhaust at stacks B3 and B4.
- (e) One (1) SLI spray paint system (**identified as EU-02**), constructed in 2003, and having a maximum throughput capacity of 16.5 pounds of basecoat per hour and 35.8 pounds of clearcoat per hour. The paint system consists of:
 - (1) One (1) basecoat booth equipped with two (2) high volume low pressure (HVLP) spray guns, with emissions of particulate matter controlled using dry filters, which exhaust at stack C1.
 - (2) One (1) flash-off area, with emissions exhausted at stack C2a.
 - (3) One (1) clearcoat booth, equipped with one (1) high volume low pressure (HVLP) spray gun, with emissions of particulate matter controlled using dry filters, which exhaust at stack C3.
 - (4) One (1) pre-heater with emissions exhausted at stack C4.
 - (5) One (1) bake oven with emissions exhausted at stack C5.
 - (6) One (1) repair paint booth, equipped with one (1) high volume low pressure (HVLP) spray gun, with emissions exhausted at stack C6.

Facility Description [326 IAC 2-7-5(15)]

- (f) **One (1) glue application area (identified at EU-04), having a maximum throughput capacity of 37.07 pounds of adhesive per hour, applied using two (2) spray guns, with emissions exhausted at stack H1.**
- ~~(3) One (1) paint booth with one (1) HVLP spray gun, with a maximum capacity to paint 100 units per hour, using dry filters to control particulate matter emissions, and exhausting to two (2) stacks, identified as C1 and C2. (Constructed in 1991)~~
- ~~(4) One (1) clear coat booth with one (1) HVLP spray gun, with a maximum capacity to paint 100 units per hour, using a waterwash filter to control particulate matter emissions, and exhausting to one (1) stack, identified as C3. (Constructed in 1993)~~
- (5g) **One (1) rail area, with ~~one (1)~~ two (2) HVLP spray guns and one (1) flow coating spray system, with a maximum capacity to paint twelve (12) units per hour, using dry filters for overspray control and exhausting to one stack, identified as D1. (Constructed in 1998)**
- (6h) **One (1) mold shop, with ~~four (4)~~ five (5) air atomization spray guns, with a maximum capacity to paint four (4) units per month, exhausting to one (1) stack, identified as E1. (Constructed in 1998)**
- (7i) **One (1) 110 gallon methylene chloride cleaning tank, to be used on a quarterly basis for approximately 60 hours each quarter.**

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 PSD Limit [326 IAC 2-2][40 CFR 52.21]

The VOC emissions from the entire source shall be limited as follows:

- (a) **The VOC emissions from the SLI Spray Paint booth (identified as EU-02) and paint touch-up booth shall not exceed sixty (60) tons per twelve (12) consecutive month period, with compliance determined at the end of each month.**
- (b) **The VOC emissions from the glue application facility (identified as EU-04) shall not exceed twenty-four (24) tons per twelve (12) consecutive month period, with compliance determined at the end of each month.**
- (c) **The VOC emissions from the gelcoat and chop booths (identified as EU-01.1 and EU-01.2) shall not exceed twenty-four (24) tons per twelve (12) consecutive month period, with compliance determined at the end of each month.**
- (d) **The VOC emissions from the gelcoat and chop booths (identified as EU-A and EU-B) shall not exceed one hundred and fourteen (114) tons per twelve (12) consecutive month period, with compliance determined at the end of each month.**
- (e) **The VOC emissions from the Rail Area and Mold Shop shall not exceed twenty-five (25) tons per twelve (12) consecutive month period, with compliance determined at the end of each month.**

These limits are equivalent to 247 tons of VOC per twelve (12) consecutive month period. Therefore, the provisions of 326 IAC 2-2 and 40 CFR 52.21 not applicable.

D.1.42 General Reduction Requirements for New Facilities [326 IAC 8-1-6]

- ~~(a)~~ Pursuant to CP No. 039-2711-00110, issued on January 12, 1993, the input volatile organic compound (VOC) content of coating to the paint booth and clear coat booth exhausting to stacks G1, G2 and G3 shall be less than twenty five (25) tons per twelve (12) month consecutive period, rolled on a monthly basis. This usage limit is required to limit the potential to emit of VOCs to less than twenty five (25) tons per twelve (12) consecutive month period. Compliance with this limit makes 326 IAC 8-1-6, not applicable.
- (a) Pursuant to 326 IAC 8-1-6 (New Facilities - General Reduction Requirements), the SLI Spray Paint System (identified as EU-02) and the existing final touch-up booth shall comply with the following requirements:**
- (1) The amount of VOC used shall not exceed sixty (60) tons per twelve (12) consecutive month period, with compliance determined at the end of each month.**
 - (2) Surface coatings applied in the basecoat, clear coat, and paint repair booths shall be applied using high volume low pressure (HVLP) spray guns.**
 - (3) The VOC content of basecoat paints shall not exceed 6.3 pounds of VOC per gallon of coating as applied.**
 - (4) The VOC content of clear coat paints shall not exceed 3.7 pounds of VOC per gallon of coating as applied.**
- (b) The emissions of volatile organic compounds from the gelcoat and chop booths (identified as EU-01.1 and EU-1.2) shall not exceed twenty-four (24) tons per twelve (12) consecutive month period, with compliance determined at the end of each month. VOC emissions from the gel coats and resins shall be calculated by multiplying the usage of each gel coat and resin by the emission factor provided by the "Unified Emission Factors for Open Molding of Composites", Composites Fabricators Association, April 1999. Compliance with this limit makes 326 IAC 8-1-6 (New Facilities - General Reduction Requirements) not applicable to these gel coat and chop booths.**
- (c) The amount of VOC used in the glue application facility (identified as EU-04) shall not exceed twenty-four (24) tons per twelve (12) consecutive month period, with compliance determined at the end of each month. Compliance with this limit makes 326 IAC 8-1-6 (New Facilities - General Reduction Requirements) not applicable to the glue application facility.**
- (bd)** Pursuant to CP No. 039-9503-00110, issued July 10, 1998, the input volatile organic compound (VOC) content of coating to the rail area and mold shop shall be less than twenty five (25) tons per twelve (12) consecutive month period, rolled on a monthly basis. This usage limit is required to limit the potential to emit of VOCs to less than twenty five (25) tons per twelve (12) consecutive month period. Compliance with this limit makes 326 IAC 8-1-6, not applicable.

D.1.2 New Source Toxics Control [326 IAC 2-4.1-1]

~~Pursuant to the MACT determination under 326 IAC 2-4.1-1, and CP No. 039-9503-00110, issued on July 10, 1998, operating conditions for the rail area and mold shop shall be the following:~~

- ~~(a) Use of resins and gel coats that contain styrene shall be limited such that the potential to emit (PTE) volatile organic hazardous air pollutant (HAP) from use of such resins and gel coats only shall be less than ten (10) tons per twelve (12) consecutive month period of any single HAP or twenty five (25) tons per twelve (12) consecutive month period of any combination of HAPS. Compliance with this limit shall be determined based upon the following criteria:~~
- ~~(1) Monthly usage by weight, content of monomer that is HAP, method of application, and other emission reduction techniques for each gel coat and resin shall be recorded. Volatile organic HAP emissions shall be calculated by multiplying the usage of each gel coat and resin by the emission factor that is appropriate for the monomer content, method of application, and other emission reduction techniques for each gel coat and resin, and summing the emissions for all gel coats and resins. Emission factors shall be obtained from the reference approved by IDEM; OAQ.~~
- ~~(2) The emission factors approved for use by IDEM, OAQ shall be taken from the following reference: "Unified Emission Factors for Open Molding of Composites", Composites Fabricators Association, April 1999, with the exception of the emission factors for controlled spray application. This reference is included with this permit. For HAP-emitting operations not addressed by this reference, emission factors shall be taken from U.S. EPA's AP-42 document. For the purposes of these emission calculations, HAP monomer in resins and gel coats that is not styrene or methyl methacrylate shall be considered as styrene on an equivalent weight basis.~~

D.1.4 Particulate Matter (PM) [326 IAC 6-3-2(e)] [40 CFR 52, Subpart P]

Pursuant to 40 CFR 52, Subpart P, the particulate matter (PM) overspray emissions from the gel coat booth, chop booth, paint booth, clear coat booth, rail area, and mold shop, and glue application area shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

D.1.5 Emissions Standards for Reinforced Plastics Composites Fabricating [326 IAC 20-25-3]

Pursuant to 326 IAC 20-25-3, the gelcoat and chop booths shall comply with the following conditions:

- (a) The total HAP monomer content of the following materials shall be limited based on the application method used and the products produced as specified in the following table:

Fiber Reinforced Plastics Composites Products	HAP Monomer Content (Weight %)
Resin, Manual or Mechanical Application	
Production-Speciality Products	48*

Fiber Reinforced Plastics Composites Products	HAP Monomer Content (Weight %)
Production-Noncorrosion Resistant Unfilled	35*
Production-Noncorrosion Resistant Filled (greater than or equal to 35% by weight)	38
Production, Noncorrosion Resistant, Applied to Thermoformed Thermoplastic Sheet	42
Production, Class I, Flame and Smoke	60*
Shrinkage Controlled	52
Tooling	43
Gel Coat Application	
Production-Pigmented	37
Clear Production	44
Tooling	45
Production-Pigmented, subject to ANSI ^a Standards	45
Production-Clear, subject to ANSI ^a standards	50

a - American National Standards Institute.

* - Categories that must use mechanical nonatomized application technology or manual as stated in subsection (c).

Compliance with these HAP monomer content limits shall be demonstrated on a monthly basis. If all of the resins and gel coats used during a month meet the specified HAP monomer content limits, then maintaining records of content is sufficient for demonstrating compliance with the HAP monomer content limits.

Compliance with the limitations contained in this condition may be demonstrated using monthly emission averaging within each resin or gel coat application category listed in subsection (b) by the use of resins or gel coats with HAP monomer contents lower than the limits specified, and/or additional emission reduction techniques approved by IDEM, OAQ.

Examples of emission reduction techniques include, but are not limited to, using nonatomized application to apply resins or gel coats within a category that does not require nonatomized application, lower monomer content resins and gel coats, vapor suppression, vacuum bagging, or installing a control device. This is allowed to meet the HAP monomer content limits for resin and gel coats within each category, and shall be calculated on an equivalent emissions mass basis monthly to demonstrate compliance as shown below:

For averaging within a category

$$\sum E_{m_A} \leq \sum (M_R * E_a)$$

Where:

M_R	=	Total monthly mass of material within each category (tons).
E_a	=	Emission factor for each material based on allowable monomer content and allowable application method for each category (lbs of monomer per ton of resin or gel coat applied).
Em_A	=	Actual monthly emissions from all materials used within a category based on material specific emission factors, emission reduction techniques and emission controls (lbs of monomer).

Note: Fillers may not be used when averaging.

(b) The following categories of materials in subsection (a) shall be applied using mechanical nonatomized application technology or manual application:

- (1)** Production noncorrosion resistant, unfilled resins from all sources.
- (2)** Production, speciality product resins from all sources.
- (3)** Tooling resins used in the manufacture of watercraft.
- (4)** Production resin used for Class I flame and smoke products.

Nonatomized application equipment means the devices where resin or gel coat material does any of the following:

- (1)** Flows from the applicator, in a steady state in a observable coherent flow, without droplets, for a minimum distance of three (3) inches from the applicator orifices such as flow coaters, flow choppers, and fluid impingement equipment.
- (2)** Is mechanically dispensed within or on to a paint roller applicator such as pressure fed rollers.
- (3)** Is deposited on fiber reinforcement moving through a resin or gel coat bath such as resin impregnators.

Nonatomized spray application technology includes flow coaters, flow choppers, pressure-fed rollers, fluid impingement, or other non-spray applications of a design and specifications approved by IDEM, OAQ.

Filled resins are resins containing greater than or equal to thirty-five percent (35%) by weight inert filler material, such as silica micro-spheres or micro-balloons, added to alter the density or other physical properties of the resin. The term "inert filler" does not include pigments.

(c) Unless specified in subsection (b), gel coat application and mechanical application of resins shall be by any of the following spray technologies:

- (1)** Nonatomized application technology.
- (2)** Air-assisted airless.
- (3)** Airless.
- (4)** High volume, low pressure (HVLP).

- (5) Equivalent emission reduction technologies to subdivisions (2) through (4).
- (d) The following cleaning operation standards for resin and gel coat application equipment shall apply:
 - (1) For routine flushing of resin and gel coat application equipment such as spray guns, flow coaters, brushes, rollers, and squeegees, a cleaning solvent shall contain no HAPs. This emission standard does not apply to solvents used for removing cured resin or gel coat from application equipment.
 - (2) A source must store HAP containing solvents used for removing cured resin or gel coat in containers with covers. The covers must have no visible gaps and must be in place at all times, except when equipment is placed in or removed from the container.
 - (3) Recycled cleaning solvents that contain less than or equal to five percent (5%) HAP by weight are considered to contain no HAP for the purposes of this subsection.

D.1.6 Work Practice Standards for Reinforced Plastics Composites Fabrication
[326 IAC 20-25-4]

Pursuant to 326 IAC 20-25-4, the following work practice standards shall be implemented:

- (a) Nonatomizing spray equipment shall not be operated at pressures that atomize the material during the application process.
- (b) Except for mixing containers as described in (g), HAP containing materials shall be kept in a closed container when not in use.
- (c) Solvents sprayed during cleanup and resin changes shall be directed into solvent collection containers.
- (d) Solvent collection containers shall be kept closed when not in use.
- (e) Clean-up rags with solvent shall be stored in closed containers.
- (f) Closed containers shall be used for the storage of the followings:
 - (1) All production and tooling resins that contain HAPs.
 - (2) All production and tooling gel coats that contain HAPs.
 - (3) Waste resins and gel coats that contain HAPs.
 - (4) Cleaning materials, including waste cleaning materials.
 - (5) Other materials that contain HAPs.
- (g) All resins and gel coat mixing containers with a capacity equal to or greater than fifty-five (55) gallons must have a cover with no visible gaps in place at all times except when material is being added to or removed from a container, or when mixing or pumping equipment is being placed in or removed from a container.

D.1.7 Operator Training for Reinforced Plastics Composites Fabrication [326 IAC 20-25-8]

Pursuant to 326 IAC 20-25-8, all new and existing personnel, including contract personnel, who are involved in resin and gel coat spraying and spray-like applications (for example those applications that could result in excess emissions if performed improperly) shall be trained according to the following schedule:

- (a) All new personnel shall be trained within fifteen (15) days of hiring.
- (b) All personnel hired before March 7, 2001 shall be trained or evaluated by a supervisor within thirty (30) days of the start of operation.
- (c) To ensure training goals listed in subsection (b) are maintained, all personnel shall be given refresher training annually.
- (d) Personnel who have been trained by another owner or operator subject to 326 IAC 20-25 are exempt from subdivision (a) if written documentation that the employee's training is current is provided by the new employer.
- (e) If the result of an evaluation show that training is needed, such training shall occur within fifteen (15) days of the evaluation.
- (f) The lesson plans shall cover, for the initial and refresher training, at a minimum, all of the following topics:
 - (1) Appropriate application techniques.
 - (2) Appropriate equipment cleaning procedures.
 - (3) Appropriate equipment setup and adjustment to minimize material usage and overspray.
- (g) The Permittee shall maintain the following training records on site and available for inspection and review:
 - (1) A copy of the current training program.
 - (2) A list of current personnel, by name, that are required to be trained and the dates they were trained and the date of the most recent refresher training. Records of prior training programs and former personnel are not required to be maintained.

D.1.58 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the gel coat booth, chop booth, paint booth, clear coat booth, rail area, and mold shop and any control devices.

Compliance Determination Requirements

D.1.69 Volatile Organic Compounds (VOC)

Compliance with the VOC content and usage limitations contained in Conditions D.1.1 and D.1.2 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

D.1.710 VOC Emissions

Compliance with Conditions D.1.1 and D.1.2 shall be demonstrated within 30 days of the end of each month based on the total volatile organic compound usage for the most recent twelve (12) month period.

D.1.11 Hazardous Air Pollutants (HAP) for Reinforced Plastics Composites Fabrication [326 IAC 20-25]

Pursuant to 326 IAC 20-25, compliance with the HAP monomer content limitations in Condition D.1.2 shall be determined by one of the following:

- (a) The manufacturer's certified product data sheet.
- (b) The manufacturer's material safety data sheet.
- (c) Sampling and analysis, using any of the following test methods, as applicable:
 - (1) 40 CFR 60, Method 24, Appendix A (July 1, 1998), shall be used to measure the total volatile HAP and volatile organic compound (VOC) content of resins and gel coats. Method 24 may be modified for measuring the volatile HAP content of resins or gel coat to require that the procedure be performed on uncatalyzed resin or gel coat samples.
 - (2) 40 CFR 63, Method 311, Appendix A (July 1, 1998), shall be used to measure HAP content in resins and gel coats by direct injection into a gas chromatograph.
- (d) An alternative method that has been approved by IDEM, OAQ.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.812 Particulate Matter (PM) [326 IAC 6-3-2(d)]

~~The dry filters for PM control shall be in operation at all times when the gel coat booth, chop booth, paint booth, clear coat booth, rail area, and mold shop are in operation.~~

Pursuant to 326 IAC 6-3-2(d), particulate emissions from the gelcoat booths, chop booths, paint booths, rail area, mold shop, and glue application area shall be controlled by dry particulate filters, and the Permittee shall operate the control device in accordance with manufacturer's specifications.

D.1.913 Monitoring

- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating booth stacks (~~A1, A2, B1, B2, C1, C2, C3, D1 and E1~~) while one or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance **Response Monitoring Plan -Preparation, Implementation, Records, and Reports** ~~Failure to Take Response Steps~~, shall be considered a violation of this permit.
- (b) Monthly inspections shall be performed of the **particulate coating** emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for ~~this-these~~ units shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed

whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance ~~Response Monitoring Plan -~~ **Preparation, Implementation, Records, and Reports** ~~Failure to Take Response Steps~~, shall be considered a violation of this permit.

- (c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.14 Record Keeping Requirements

- (a) To document compliance with Conditions D.1.1 and D.1.2, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Conditions D.1.1 and D.1.2.
 - (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
 - (2) The cleanup solvent usage for each month;
 - (3) The total VOC usage for each month; and
 - (4) The weight of VOCs emitted for each compliance period.
- (b) To document compliance with Condition D.1.812 and D.1.913, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.15 Record Keeping Requirements for Reinforced Plastics Composites Fabrication [326 IAC 20-25]

- (a) To document compliance with Condition D.1.5, the Permittee shall maintain records that are complete and sufficient to establish compliance with the HAP monomer content limits. Records maintained shall be taken monthly. Examples of such records include by are not limited to:
 - (1) The usage by weight and monomer content of each resin and gel coat used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS), manufacturer's certified product data sheets, and calculations necessary to verify the type, amount used, and HAP content of each resin or gel coat;
 - (2) Method of application and other emission reduction techniques for each resin and gel coat used;
 - (3) Monthly calculations demonstrating compliance on an equivalent emissions mass basis if non-compliant resins or gel coats are used during that month.

- (b) To document compliance with Condition D.1.7, the Permittee shall maintain the following records:**
 - (1) A copy of the current training program.**
 - (2) A list of all current personnel, by name, that are required to be trained and the dates they were trained and the date the most recent refresher training. Records of prior training programs and former personnel are not required to be maintained.**
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.**

D.1.1416 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.1.1 and D.1.2 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

D.1.17 Reporting Requirements for Reinforced Plastics Composites Fabrication [326 IAC 20-25]

If monthly emissions averaging pursuant to 326 IAC 20-25-3(h)(2) and Condition D.1.5(a) are used, the Permittee shall submit a quarterly summary report and supporting calculations pursuant to 326 IAC 20-25-7(c).

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Quarterly Report

Source Name: Ranch Fiberglas, Inc.
Source Address: 28564 Holiday Place, Elkhart, Indiana 46517
Mailing Address: 28564 Holiday Place, Elkhart, Indiana 46517
Part 70 Permit No.: T039-10481-00110
Facility: ~~Paint booth and Clear coat booth exhausting to stacks C1, C2, and C3~~ **SLI Spray Paint System (identified as EU-02)**
Parameter: Input VOC
Limit: Less than ~~twenty five (25)~~ **sixty (60)** tons per twelve **(12)** consecutive month period **with compliance determined at the end of each month** ~~rolled on a monthly basis~~

YEAR: _____

Month	VOC Usage/Emissions (tons/month)	VOC Usage/Emissions Previous 11 Months (tons)	VOC Usage/Emissions 12 Month Total (tons)
Month 1			
Month 2			
Month 3			

- 9 No deviation occurred in this quarter.
- 9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Quarterly Report

Source Name: Ranch Fiberglas, Inc.
Source Address: 28564 Holiday Place, Elkhart, Indiana 46517
Mailing Address: 28564 Holiday Place, Elkhart, Indiana 46517
Part 70 Permit No.: T039-10481-00110
Facility: Glue Application Area (identified as EU-04)
Parameter: Input VOC
Limit: Less than twenty four (24) tons per twelve (12) consecutive month period
with compliance determined at the end of each month

YEAR: _____

Month	VOC Usage/Emissions (tons/month)	VOC Usage/Emissions Previous 11 Months (tons)	VOC Usage/Emissions 12 Month Total (tons)
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Quarterly Report

Source Name: Ranch Fiberglas, Inc.
Source Address: 28564 Holiday Place, Elkhart, Indiana 46517
Mailing Address: 28564 Holiday Place, Elkhart, Indiana 46517
Part 70 Permit No.: T039-10481-00110
Facility: Gel Coat and Chop Booths (identified as EU-01.1 and EU-01.2)
Parameter: Input VOC
Limit: Less than twenty four (24) tons per twelve (12) consecutive month period
with compliance determined at the end of each month

YEAR: _____

Month	VOC Usage/Emissions (tons/month)	VOC Usage/Emissions Previous 11 Months (tons)	VOC Usage/Emissions 12 Month Total (tons)
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Quarterly Report

Source Name: Ranch Fiberglas, Inc.
Source Address: 28564 Holiday Place, Elkhart, Indiana 46517
Mailing Address: 28564 Holiday Place, Elkhart, Indiana 46517
Part 70 Permit No.: T039-10481-00110
Facility: Gel Coat and Chop Booths (identified as EU-A and EU-B)
Parameter: Input VOC
Limit: Less than one hundred and fourteen (114) tons per twelve (12) consecutive month period with compliance determined at the end of each month

YEAR: _____

Month	VOC Usage/Emissions (tons/month)	VOC Usage/Emissions Previous 11 Months (tons)	VOC Usage/Emissions 12 Month Total (tons)
Month 1			
Month 2			
Month 3			

- 9 No deviation occurred in this quarter.
- 9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Quarterly Report

Source Name: Ranch Fiberglas, Inc.
Source Address: 28564 Holiday Place, Elkhart, Indiana 46517
Mailing Address: 28564 Holiday Place, Elkhart, Indiana 46517
Part 70 Permit No.: T039-10481-00110
Facility: Rail area and Mold shop
Parameter: Input VOC
Limit: less than 25 per twelve (12) consecutive month period with compliance determined at the end of each month

YEAR: _____

Month	VOC Usage/Emissions (tons/month)	VOC Usage/Emissions Previous 11 Months (tons)	VOC Usage/Emissions 12 Month Total (tons)
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Conclusion

The construction of this proposed modification shall be subject to the conditions of the attached Part 70 Significant Source Modification No. 039-16282 and Significant Permit Modification No. 039-16266-00110.

Appendix A: Emissions Calculations
VOC and Particulate Matter Emissions
From Adhesive Application

Page 1 of 7 TSD App A

Company Name: Ranch Fiberglass, Inc.
Address City IN Zip: 28564 Hoiday Place, Elkhart, Indiana 46517
CP: 039-10481
Plt ID: 039-00110
Reviewer: ERG/AAB
Date: 11/05/02

Material	Density (Lb/Gal)	Weight % volatiles	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	Transfer Efficiency
Con-Bond	6.90	80.04%	0.0%	80.0%	0.0%	17.00%	0.53700	10.000	5.52	5.52	29.66	711.77	129.90	8.10	75%

State Potential Emissions

29.66 711.77 129.90 8.10

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)

Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)

Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)

Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)

Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)

Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)

Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)

Total = Worst Coating + Sum of all solvents used

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Appendix A: Emission Calculations

Page 2 of 7 TSD App A

HAP Emission Calculations**For Adhesive Application****Company Name: Ranch Fiberglass, Inc.****Address City IN Zip: 28564 Hoiday Place, Elkhart, Indiana 46517****CP#: 039-10481****Plt ID: 039-00110****Permit Reviewer: ERG/AAB****Date: 11/05/02**

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Hexane	Weight % Toluene	Hexane Emissions (ton/yr)	Toluene Emissions (ton/yr)
Con-Bond	6.9	0.537000	10.00	13.00%	30.00%	21.10	48.69

Total State Potential Emissions

21.10**48.69****METHODOLOGY**
$$\text{HAPS emission rate (tons/yr)} = \text{Density (lb/gal)} * \text{Gal of Material (gal/unit)} * \text{Maximum (unit/hr)} * \text{Weight \% HAP} * 8760 \text{ hrs/yr} * 1 \text{ ton/2000 lbs}$$

**Appendix A: Emissions Calculations
VOC and Particulate Matter Emissions
From Surface Coating Operations**

Page 3 of 7 TSD App A

**Company Name: Ranch Fiberglass, Inc.
Address City IN Zip: 28564 Hoiday Place, Elkhart, Indiana 46517
CP: 039-10481
Plt ID: 039-00110
Reviewer: ERG/AAB
Date: 11/05/02**

Material	Density (Lb/Gal)	Weight % volatiles	Weight % Water	Weight % Organics	Volume % Water	Volume % Non- Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	Transfer Efficiency
EU-02: Painting															
Basecoat	7.57	82.57%	0.0%	82.6%	0.0%	17.43%	0.21800	10.000	6.25	6.25	13.63	327.03	59.68	4.41	65%
Clearcoat	8.64	41.78%	0.0%	41.8%	0.0%	58.22%	0.41500	10.000	3.61	3.61	14.98	359.54	65.62	32.00	65%

State Potential Emissions

28.61 686.56 125.30 36.41

METHODOLOGY

Surface coatings applied using HVLP spray guns.

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)

Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)

Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)

Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)

Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)

Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)

Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)

Total = Worst Coating + Sum of all solvents used

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Appendix A: Emission Calculations

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HAP Emission Calculations**For Surface Coating Operations****Company Name: Ranch Fiberglass, Inc.****Address City IN Zip: 28564 Hoiday Place, Elkhart, Indiana 46517****CP#: 039-10481****Plt ID: 039-00110****Permit Reviewer: ERG/AAB****Date: 11/05/02**

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % Toluene	Xylene Emissions (ton/yr)	Toluene Emissions (ton/yr)
Basecoat	7.9	0.136000	10.00	25.00%	0.00%	11.69	0.00
Basemaker	7.1	0.082000	10.00	28.00%	5.00%	7.12	1.27
Clearcoat	8.6	0.415000	10.00	12.00%	0.00%	18.85	0.00

Total State Potential Emissions

37.66**1.27****METHODOLOGY**
$$\text{HAPS emission rate (tons/yr)} = \text{Density (lb/gal)} * \text{Gal of Material (gal/unit)} * \text{Maximum (unit/hr)} * \text{Weight \% HAP} * 8760 \text{ hrs/yr} * 1 \text{ ton/2000 lbs}$$

Appendix A: Emissions Calculations
VOC and Particulate
From Surface Coating Operations

Page 5 of 7 TSD App A

Company Name: Ranch Fiberglass, Inc.
Address City IN Zip: 28564 Hoiday Place, Elkhart, Indiana 46517
CP: 039-10481
Plt ID: 039-00110
Reviewer: ERG/AAB
Date: 11/05/02

Material	Density (Lb/Gal)	Weight % volatiles	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	Transfer Efficiency
EU-01: Gelcoat & Lamination Processes															
Gelcoat*	11.1	40.00%	0.0%	40.0%	0.0%	0.00%	0.69000	7.400	4.44	4.44	(a)	(a)	(a)	7.45	95%
Resin*	9.2	37.00%	0.0%	37.0%	0.0%	0.00%	5.70400	7.400	3.39	3.39	(a)	(a)	(a)	53.34	95%
DDM-9 Lupersol for Gelcoat	8.4	98.00%	0.0%	98.0%	0.0%	0.00%	0.01300	7.400	8.19	8.19	0.79	18.92	3.45	0.00	95%
DDM-9 Lupersol for Lamination	8.4	98.00%	0.0%	98.0%	0.0%	0.00%	0.08600	7.400	8.19	8.19	5.21	125.13	22.84	0.02	95%
Omyacarb	14.0	0.00%	0.0%	0.0%	0.0%	0.00%	1.09100	7.400	0.00	0.00	0.00	0.00	0.00	24.75	95%
Chemlease PMR	7.3	99.00%	0.0%	99.0%	0.0%	0.00%	0.00200	7.400	7.18	7.18	0.11	2.55	0.47	0.00	95%
Chemlease #15 Sealer	7.3	99.00%	0.0%	99.0%	0.0%	0.00%	0.00100	7.400	7.18	7.18	0.05	1.27	0.23	0.00	95%
Chemlease Mold Cleaner	6.9	100.00%	0.0%	100.0%	0.0%	0.00%	0.00100	7.400	6.91	6.91	0.05	1.23	0.22	0.00	95%

(a) VOC emissions are approximately equal to Styrene emissions. See styrene calculations on next page.

State Potential Emissions

6.21 149.10 27.21 85.57

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)

Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)

Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)

Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)

Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)

Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)

Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)

Total = Worst Coating + Sum of all solvents used

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Appendix A: Emissions Calculations
Styrene Emissions from Gelcoat/Resin Application

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Company Name: Ranch Fiberglass, Inc.
Address City IN Zip: 28564 Hoiday Place, Elkhart, Indiana 46517
Part 70 Permit #: 039-10481
Plt ID: 039-00110
Reviewer: ERG/AAB
Date: 11/05/02

Material	Process	Density (lb/gal)	Styrene Content (% weight)	Throughput (lbs/hr)	Emission Factor (lb/Ton)*	Styrene Emissions (lbs/hr)	Styrene Emissions (tons/yr)
Primer Gel	EU-01	11.17	40	56.67	439	12.44	54.48
Production Resin	EU-01	9.16	32	386.61	68.48	13.24	57.98
Total							112.46

Methodology

Emission Factors taken from the CFA Unified Emission Factors

PTE (tons/year) = Gelcoat/Resin Usage (tons/hr) * Emission Factor (lb/ton) * 8760 hrs/yr * 1 ton/2000lbs

Appendix A: Emission Calculations
HAP Emission Calculations
Gelcoat and Lamination Processes
Company Name: Ranch Fiberglass, Inc.
Address City IN Zip: 28564 Hoiday Place, Elkhart, Indiana 46517
CP#: 039-10481
Pit ID: 039-00110
Permit Reviewer: ERG/AAB
Date: 11/05/02

Page 7 of 7 TSD AppA

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % Toluene	Weight % Ethylbenzene	Weight % MEK	Xylene Emissions (ton/yr)	Toluene Emissions (ton/yr)	Ethylbenzene Emissions (ton/yr)	MEK Emissions (ton/yr)
DDM-9 Lupersol for Gelcoat	8.4	0.013000	7.40	0.00%	0.00%	0.00%	2.00%	0.00	0.00	0.00	0.07
DDM-9 Lupersol for Laminatio	8.4	0.086000	7.40	0.00%	0.00%	0.00%	2.00%	0.00	0.00	0.00	0.47
Omyacarb	14.0	1.091000	7.40	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00
Chemlease PMR	7.3	0.002000	7.40	50.00%	0.00%	15.00%	0.00%	0.23	0.00	0.07	0.00
Chemlease #15 Sealer	7.3	0.001000	7.40	45.00%	0.00%	15.00%	0.00%	0.11	0.00	0.04	0.00
Chemlease Mold Cleaner	6.9	0.001000	7.40	0.00%	55.00%	0.00%	55.00%	0.00	0.12	0.00	0.12

Total State Potential Emissions	0.34	0.12	0.11	0.66
---------------------------------	-------------	-------------	-------------	-------------

METHODOLOGY

HAPS emission rate (tons/yr) = Density (lb/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs

Appendix B April 4, 2003

BEST AVAILABLE CONTROL TECHNOLOGY (BACT) DETERMINATION

Source Background and Description

Source Name:	Ranch Fiberglas, Inc.
Source Location:	28564 Holiday Place, Elkhart, Indiana 46517
County:	Elkhart
SIC Code:	3089
Operation Permit No.:	T039-10481-00110
Operation Permit Issuance Date:	August 9, 2000
Significant Source Modification No.:	039-16282-00110
Significant Permit Modification No.:	039-16266-00110
Permit Reviewer:	ERG/AAB

BACT Analysis

The Indiana Department of Environmental Management (IDEM) has reviewed the BACT analysis submitted by Ranch Fiberglas, Inc. for the SLI Spray Paint System to be constructed at their plant located in Elkhart, Indiana. The new emission units consists of the following processes/equipment:

One (1) SLI spray paint system (identified as EU-02), constructed in 2003, and having a maximum throughput capacity of 16.5 pounds of basecoat per hour and 35.8 pounds of clearcoat per hour. The paint system consists of

- (1) One (1) basecoat booth equipped with two (2) high volume low pressure (HVLP) spray guns, with emissions of particulate matter controlled using dry filters, which exhaust at stack C1.
- (2) One (1) flash-off area, with emissions exhausted at stack C2a.
- (3) One (1) clearcoat booth, equipped with one (1) high volume low pressure (HVLP) spray gun, with emissions of particulate matter controlled using dry filters, which exhaust at stack C3.
- (4) One (1) pre-heater with emissions exhausted at stack C4.
- (5) One (1) bake oven with emissions exhausted at stack C5.
- (6) One (1) repair paint booth, equipped with one (1) high volume low pressure (HVLP) spray gun, with emissions exhausted at stack C6.

IDEM conducts BACT analyses in accordance with the *"Top-Down" Best Available Control Technology Guidance Document* outlined in the 1990 draft USEPA *New Source Review Workshop Manual*, which outlines the steps for conducting a top-down BACT analysis. Those steps are listed below.

- (1) Identify all potentially available control options;
- (2) Eliminate technically infeasible control options;
- (3) Rank remaining control technologies by control effectiveness;
- (4) Evaluate the most effective controls and document the results; and
- (5) Select BACT.

Also, in accordance with the *"Top-Down" Best Available Control Technology Guidance Document* outlined in the 1990 draft USEPA *New Source Review Workshop Manual*, BACT analyses take into account the energy, environmental, and economic impacts on the source. These reductions may be determined through the application of available control techniques, process design, and/or operational limitations. Such reductions are necessary to demonstrate that the emissions remaining after application of BACT will not cause or contribute to air pollution thereby protecting public health and the environment. The BACT determination described below is based on information submitted by the source and on information obtained from the EPA RACT/BACT/LAER (RBLC) Clearinghouse.

VOC BACT

The new emission unit consists of two new surface coating booths, which are the primary source of VOC emissions. The potential VOC emissions from these units is 124 tons per year.

Step 1 - Identify Control Options

Control Options Evaluated - The following available technologies were evaluated to control VOC emissions from the new surface coating facility. With the aid of EPA's RACT/BACT/LAER Clearinghouse (RBLC), the source identified the following control technologies:

- (1) RTO Incineration
- (2) Catalytic Incinerator
- (3) Zeolite Concentrator with oxidizer
- (4) Chemical Scrubber
- (5) Carbon Concentrator with Oxidizer
- (6) Condensation
- (7) Biofiltration
- (8) Limited Operation Without Add-on Controls*

* - Note: Option 8 includes the following operational constraints:

- (a) Use only HVLP spray guns to apply surface coatings
- (b) Limit the VOC content of the base coat paints to 6.3 lbs per gallon of coating.
- (c) Limit the VOC content of the clear coat paints to 3.7 lbs per gallon of coating.
- (d) Limit the VOC emissions from the two new paint booths and the existing finishing booth to 60 tons per twelve (12) consecutive month period.
- (e) Use good work practices to minimize VOC losses during paint preparation and clean-up activities.

The basecoat and clearcoat paints selected represent the lowest VOC content paints that can be used for to produce their products. The basecoats have been selected to match both in color and appearance OEM automotive finishes. The paint manufacturer, DuPont, recommends that the base and basemaker be mixed in a one-to-one ratio. However, Ranch Fiberglas has worked with DuPont to increase the solids content and reduce the VOC content of the basecoat such that the paint applied will contain five parts base and three parts basemaker, which is equivalent to 6.3 pounds of VOC per gallon of coating.

Step 2 - Eliminate technically infeasible control options

Options 4, 5, 6 and 7 have been determined to be not technically feasible for this type of emission unit. A chemical scrubber would be impractical due to the multiple solvents used in the coatings, a carbon concentrator with oxidizer represents a potential fire hazard for this type of unit, and condensation would be impractical due to the low VOC concentrations in the waste stream. A biofiltration system was determined to be impractical because of space constraints at the source.

Step 3 - Rank remaining control technologies by control effectiveness

A summary of the relative effectiveness of the four remaining technically feasible approaches for controlling VOC emissions is shown in the following table.

BACT Option	Post BACT Emission Rate (Tons/year)	Emission Reduction (Tons/year)	Overall Pollution Reduction Efficiency (%)
RTO Incineration	6.2	118.6	95
Zeolite Concentrator with Oxidizer	12.5	112.3	90
Catalytic Incineration	18.73	106.1	85
Limited Operation without Controls	60	64.8	51.9

Step 4 - Evaluate the most effective controls and document results

The relative costs of each of the BACT options is summarized in the following table. A complete breakdown of the costs associated with the RTO incinerator, Zeolite Concentrator with oxidizer, and catalytic incinerator is included in Table 1. The data shown in Table 1 was prepared by Bruce Carter & Associates under contract for Ranch Fiberglas, Inc. The table includes estimates of the cost of the VOC control equipment (including the initial capital cost of the various components of each system) and the annual operating costs. The estimated total capital cost was calculated using the factoring method for determining direct and indirect costs. The equipment costs and operating costs were calculated using cost estimates provided by vendors, the OAQPS Control Cost Manual and the VataVule Air Pollution Control Cost Index. An interest rate of 10% and an equipment lift of 10 years was used to calculate the capital recovery cost. The basis of the cost effectiveness used to evaluate the control options is the ratio of the annualized cost to the amount of VOC (in tons) removed per year.

BACT Option	Total Annulized Cost (\$/year)	Cost Effectiveness (\$/ton)	
		Average	Incremental
RTO Incineration	1,132,469	9,549	181,434
Zeolite Concentrator with Oxidizer	331,211	3,294	59,293
Catalytic Incineration	1,911,162	18,011	46,303
Limited Operation without Controls	0	0	0

The costs for the RTO, and catalytic incinerator are impractical because both the average and incremental costs per ton of VOC removed are prohibitive. The capital costs of these options are also high, with the cost varying from 3.2 times to 6.5 times the total cost of the facility being modified. The zeolite concentrator system with incinerator has the lowest cost per ton of VOC. This was projected to be \$3,294 per tons of VOC removed, based on an operating period of 8,760 hours per year and a VOC emission rate of 124.8 tons per year (uncontrolled PTE). However, based on projected production needs, Ranch Fiberglas, Inc., proposes to limit the VOC emissions to 60.0 tons per year. Based on a VOC emission limit of 60.0 tons per year, the cost effectiveness for this control device is \$6,168 per ton of VOC removed. In addition to the cost per ton of VOC removed, Ranch has also estimated that the proposed facility will generate about \$13,000 in annual profit over the next three years, which is significantly less than the total annualized cost of \$370,093. In addition, the total capital investment for this device is \$1.23 million, which is 3.2 times greater than the total capital investment of \$0.35 million required for the installation of their facility.

Step 5 - Select BACT

As part of the BACT analysis, the source also reviewed BACT determinations for similar sources using EPA's BACT/RACT/LAER Clearinghouse and previously issued IDEM permits. A list of the sources considered are included in Table 2.

A number of facilities identified during this review used add-on control devices similar to those considered above to control VOC emissions. However, the sources using control devices had relatively high annual VOC throughput ranging from 172.2 tons per year to 520 tons per year. Many also used automatic application systems. The SLI system proposed by Ranch Fiberglas, Inc. will be a manual spray application process with VOC emissions less than 60 tons per year. For sources using manual spray application methods with relatively low VOC usage, BACT has been determined to be pollution prevention combined with the use of low VOC coatings and the use of spray application equipment with high transfer efficiencies. The use of add-on control devices have not been considered to be BACT for these types of operations.

Based on the relatively high costs associated with the operation of add-on control devices and the acceptance of operational limits as BACT for similar emission units at other sources, IDEM has determined that BACT for the SLI Spray Paint System is limited operation without add-on control devices.

Pursuant to 326 IAC 8-1-6 (New Facilities - General Reduction Requirements), the source will be required to comply with the following requirements:

- (a) The amount of VOC used in the SLI Spray Paint System (identified as EU-02) and the existing final touch-up booth shall not exceed sixty (60) tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (b) Surface coatings applied in the basecoat, clear coat, and paint repair booths shall be applied using high volume low pressure (HVLP) spray guns.
- (c) The VOC content of basecoat paints shall not exceed 6.3 pounds of VOC per gallon of coating as applied.
- (d) The VOC content of clear coat paints shall not exceed 3.7 pounds of VOC per gallon of coating as applied.
- (e) The Permittee shall use good work practices to minimize VOC losses during paint mixing, paint application, and clean-up activities.

Table 1 : Economic Analysis of Technically Feasible Control Options

		Factors	RTO Incineration	Zeolite Concentrat or with Oxidizer	Catalytic Incineration
Purchase and Installation Costs					
Purchase Costs	Incinerator and auxiliary equipment: Instrumentation: Sales taxes: Freight: Total:	0.10 0.06 0.05	\$1,172,553 \$117,255 \$70,353 \$58,628 \$1,418,789	\$575,201 \$57,520 \$34,512 \$28,760 \$695,994	\$709,294 \$70,929 \$42,558 \$35,465 \$858,246
Direct Installation Costs	Foundations and supports: Handling and erection: Electrical: Piping: Insulation for duct work: Painting: Site preparation: Total:	0.08 0.14 0.04 0.02 0.01 0.01	\$113,503 \$198,630 \$56,752 \$28,376 \$14,188 \$14,188 \$5,675 \$431,311	\$55,679 \$97,439 \$27,840 \$13,920 \$6,960 \$6,960 \$2,784 \$907,576	\$68,660 \$120,154 \$34,330 \$17,165 \$8,582 \$8,582 \$3,433 \$1,119,152
Indirect Installation Costs	Engineering: Construction and field expenses: Contractor fees: Start-up: Performance test: Contingencies: Total:	0.10 0.05 0.10 0.02 0.01 0.03	\$141,879 \$70,939 \$141,879 \$28,376 \$14,188 \$42,564 \$439,825	\$69,599 \$34,800 \$69,599 \$13,920 \$6,960 \$20,880 \$215,758	\$85,825 \$42,912 \$85,825 \$17,165 \$8,582 \$25,747 \$266,056
Total Capital Investment Subtotal			\$2,289,925	\$1,123,334	\$1,385,208
Capital Recovery Costs	Interest Rate = 10% Economic Lifetime = 10 years		\$372,675	\$182,817	\$212,246

Table 1 : Economic Analysis of Technically Feasible Control Options (Continued)

		Factors	RTO Incineration	Zeolite Concentrat or with Oxidizer	Catalytic Incineration
Annual Costs:					
Direct Annual Costs:					
Operating Labor	Operator: Supervisor:		\$21,681 \$3,252	\$48,782	\$21,681 \$3,252
Maintenance Labor			\$2,265		\$23,849
Maintenance Materials			\$2,265		\$23,849
Utilities	Natural Gas: Electricity:		\$472,783 \$148,273	\$92,106 \$46,388	\$1,328,242 \$155,815
Waste Treatment and Disposal			\$0.00	\$0.00	\$0.00
Replacement Parts			\$0.00	\$0.00	\$0.00
Total Direct Annual Costs			\$650,519	\$187,276	\$1,599,928
Indirect Annual Costs:					
Overhead			\$17,678	NA	\$43,579
Property taxes, insurance, and administrative charges			\$91,597	NA	\$55,408
Total Indirect Annual Costs:			\$109,275	NA	\$98,987

Table 1 : Economic Analysis of Technically Feasible Control Options (Continued)

		Factors	RTO Incineration	Zeolite Concentrat or with Oxidizer	Catalytic Incineration
Recovery Credits	Materials Recovered: Energy Recovered: Total:		\$0.00 \$0.00 \$0.00	\$0.00 \$0.00 \$0.00	\$0.00 \$0.00 \$0.00
Total Annual Cost			\$759,794	\$187,276	\$1,698,915
Total Annual Cost Summary					
Capital Recovery Cost			\$372,675	\$182,817	\$212,246
Total Annual Cost			\$759,794	\$187,276	\$1,698,915
Total Annualized Cost			\$1,132,469	\$370,093	\$1,911,161
Baseline Emissions Rate (tons per year)			124.8	124.8	124.8
Post BACT Emission Rate (tons per year)			6.24	12.48	18.7
Total Pollutant Removed			118.6	112.4	106.1
Average Cost Effectiveness of BACT (\$/ton of VOC removed)			\$9,549	\$3,294	\$18,011
Average Cost Effectiveness of BACT Assuming 60 tons per year VOC usage Limit (\$/ton of VOC removed)			\$18,874	\$6,168	\$31,853

NA - Information not available.

Table 2: Summary of BACT Determinations for Similar Surface Coating Facilities

SOURCE	LOCATION	REGULATORY AUTHORITY	SIC	AFFECTED FACILITY	BACT DETERMINATION	REFERENCE
LOWELL ENGINEERING CORP.	ALTO, MI	MDEQ	3714	PAINTING PLASTIC AUTOMOTIVE PARTS	APPLY PRIME COAT TO METAL AND PLASTIC PARTS(SIDE MIRROR); PLASTIC IS HIGH BAKE. INCINERATOR, 98% EFFICIENCY.	RBLC
ALBAR INDUSTRIES	LAPEER, MI	MDEQ	3479	COATING PLASTIC AUTO PARTS, PAINT LINE	172.7 TPY LIMIT; GENERALLY WATER-BORNE COATINGS AND ADHESION PROMOTERS. THERMAL OXIDIZER ON BAKE OVENS AND FLASH-OFF. PAINTING PLASTIC, GLASS AND METAL PARTS. DESTRUCTION EFFICIENCY OF	RBLC
VENTURE INDUSTRIES	GRAND BLANC, MI	MDEQ	3714	PAINTING PLASTIC AUTOMOTIVE PARTS	228.3 TPY LIMIT; CLEANING PURGES ARE CAPTURED AND CONTAINED. ALL EMISSIONS CONTROLLED BY PERMANENT TOTAL ENCLOSURE, CARBON CONCENTRATORS AND	RBLC
GULF STREAM COACH, INC.	NAPPANEE, IN	IDEM	3716	PAINTING OF MOTOR HOMES, BUSES, VANS, TRAVEL TRAILERS, PICK-UP TRUCKS OR PRODUCTION PARTS	WORK PRACTICES, TEST FOR NON-VOC/HAP CLEAN-UP SOLVENT, RECYCLING, HVLP, 5.64# VOC/GAL PRIMER/SEALER, 6.29 #VOC/GAL BASE COAT, 4.45 # VOC/GAL TOP COAT, LIMIT OF 129 TPY [INCLUDES 2 NON-BACT BOOTHS].	IDEM PERMITS
MONACO COACH CORPORATION	CORBURG, OR	LRAPA	3716	MOTOR HOME PAINTING & PRODUCTION	ELECTROSTATIC COATING SYSTEM, HVLP, OR EQUIVALENT METHODS, WORK PRACTICES, VOC CONTENT LIMITS IN LBS/GAL.	IDEM PERMITS & LRAPA [1]
MONACO COACH CORPORATION	WARARUSA, IN	IDEM	3716	MOTOR HOME PAINTING	HAND WIPE CLEANING, HVLP, AIR ATOMIZATION FOR REPAIRS, GOOD HOUSEKEEPING	IDEM PERMITS

Table 2: Summary of BACT Determinations for Similar Surface Coating Facilities (Continued)

SOURCE	LOCATION	REGULATORY AUTHORITY	SIC	AFFECTED FACILITY	BACT DETERMINATION	REFERENCE
DONNELLY CORPORATION	NEWAGO, MI	MDEQ	3714	COATING PLASTIC AUTO PARTS	230.30 TPY LIMIT; ADD-ON CONTROL OF BASECOAT & CLEARCOAT AUTOMATIC BOOTHS. SPRAY EQUIPMENT ALL ELECTROSTATIC OR HVLP. THERMAL OXIDIZER WITH 90% RECIRCULATION. 79% EFFICIENCY.	RBLC
NEWMAR CORPORATION	NAPPANEE, IN	IDEM	3716	MOTOR HOME PAINTING	136.74 TPY LIMIT; WORK PRACTICES, HVLP APPLICATION, AIR ATOMIZED SPRAY FOR REPAIRS.	IDEM PERMITS
FLEETWOOD - PLANT 52	DECATUR, IN	IDEM	3716	MOTOR HOME PAINTING & PRODUCTION	VOC LIMITED TO 78.4 TPY, USE OF AIR ATOMIZATION SPRAY APPLICATION	IDEM PERMITS
FLEETWOOD - PLANT 44	DECATUR, IN	IDEM	3716	MOTOR HOME PAINTING & PRODUCTION	AIR ATOMIZED SPRAY & DAILY AVERAGE LIMIT OF 73 LBS PER MOTOR HOME	IDEM PERMITS
J.I. STANLEY COMPANY, INC.	BATTLE CREEK, MI	MDEQ	2754	COATING OF POLYCARBONATE LENS	PSD-BACT; TOTAL PROCESS INCLUDES A BASECOAT BOOTH, FLASH OFF, OVEN, TOPCOAT BOOTH, FLASH OFF, OVEN & UV CURING. CATALYTIC INCINERATOR IS 70% REGENERATIVE FOR THE TOTAL PROCESS. EMISSION LIMITS: BASECOAT, 6.2VOC/GAL TOPCOAT,	RBLC
MONACO COACH CORPORATION	ELKHART, IN	IDEM	3716	MOTOR HOME PAINTING	HAND WIPE CLEANING, AIR ATOMIZED SPRAY	IDEM PERMITS
FLEETWOOD - PLANT 44	DECATUR, IN	IDEM	3716	MOTOR HOME PAINTING	MODIFIED 1989 BACT TO ACCOUNT FOR LARGER MOTOR HOMES. AIR ATOMIZATION SPRAY, LOW VOC COATINGS, & POLLUTION PREVENTION TECHNIQUES [HOUSE	IDEM PERMITS

Table 2: Summary of BACT Determinations for Similar Surface Coating Facilities (Continued)

SOURCE	LOCATION	REGULATORY AUTHORITY	SIC	AFFECTED FACILITY	BACT DETERMINATION	REFERENCE
NEWMAR CORPORATION	NAPPANEE, IN	IDEM	3716	MOTOR HOME PAINTING	VOC LIMITED TO 70 TPY	IDEM PERMITS
GBMD, INC	ELKHART, IN	IDEM	3716	TRUCK & VAN PRODUCTION & PAINTING	HVLP, 150 TPY LIMIT, 6.1 #/GAL FOR PAINTS BASED ON 30-DAY AVG, 6.8 #/GAL FOR SOLVENTS BASED ON 30-DAY AVG, WORK PRACTICES,	IDEM PERMITS
DYNAMAX CORPORATION	ELKHART, IN	IDEM	3716	MOTOR HOME PAINTING & PRODUCTION	USE BASE COAT COLORS 6.2 LBS VOC/GAL, CLEAR COAT 4.4 LBS VOC/GAL,HVLP APPLICATION EQUIPMENT, GOOD HOUSEKEEPING PRACTICES.	IDEM PERMITS
JAYCO, INC.	MIDDLEBURY, IN	IDEM	3792	MOTOR HOME PAINTING & PRODUCTION	HVLP SPRAY, GOOD HOUSE KEEPING, & VOC LIMIT OF <233 TPY.	IDEM PERMITS
EVART PRODUCTS TEXTRON, INC.	EVART, MI	MDEQ	3714	COATING PLASTIC AUTO PARTS, PAINT LINE	NEW COATING LINE CONSTRUCTED BUT AT AN EXISTING PSD SOURCE FOR VOC'S. THREE COATING SYSTEM:ADHESION PROMOTER, BASECOAT, CLEARCOAT. RECIRCULATION WITH RTO INCINERATION ON 3 AUTOMATIC BOOTHS AND DIRECT INCINERATION	RBLC
ORION PAINT AND PLASTIC, LLC	SOUTHFIELD, MI	MDEQ	3714	COATING PLASTIC AUTO PARTS, PAINT LINE	PTE FOR ALL SPRAY BOOTH, FLASH OFF, AND BAKE OVENS. ROBOTIC SPRAY APPLICATION WITH HVLP OR EQUIVALENT. REGENERATIVE THERMAL OXIDIZER RTO. AIR RECIRCUALTION	RBLC

Table 2: Summary of BACT Determinations for Similar Surface Coating Facilities (Continued)

SOURCE	LOCATION	REGULATORY AUTHORITY	SIC	AFFECTED FACILITY	BACT DETERMINATION	REFERENCE
LIBRALTER PLASTICS, INC.	WESTLAND, MI	MDEQ	3714	PAINTING PLASTIC AUTOMOTIVE PARTS	COATING OF INTERIOR PLASTIC AUTO PARTS USING WATERBORNE PAINTS WITH A MAXIMUM VOC OF 3.7 LB/GAL (MINUS WATER) AND HVLP APPLICATORS. DRY FILTERS.	RBLC
FORM VISTEON-UTICA PLANT	SHELBY, MI	MDEQ	3714	PLASTIC PARTS COATING OPERATION	SPRAY BOOTHS FOR THE COATING OF PLASTIC INSTRUMENT PANELS. WATERBORNE COATINGS REQUIRED NO CLEANUP SOLVENTS. COST OF RTO WOULD EXCEED \$11,000/TON,	RBLC
TOTER, INC.	SANGER, CA	CARB	2821	PLASTIC PARTS COATING OPERATION	LOW-VOC COATING, HVLP SPRAY GUNS IN A PAINTING BOOTH, AND AND ENCLOSED SPRAY GUN CLEANER. VOC CONTENT AS APPLIED, LESS WATER AND EXEMPT	RBLC
DELPHI AUTOMOTIVE SYSTEMS	ADRIAN, MI	MDEQ	3714	PLASTIC PARTS COATING OPERATION	PROCESS INCLUDES NATURAL GAS AND ELECTRIC OVENS. PAINT SYSTEM IS MADE UP OF: 8 PAINT BOOTHS, NAT GAS FLASH OFF TUNNEL, IR BAKE OVEN, FINAL REPAIR BOOTH, & ELECTRIC REPAIR PAINT BAKE OVEN. WATER CURTAIN, HIGH TRANSFER, LOW VOC	RBLC
HARLEY DAVIDSON TOMAHAWK SOMO FACILITY	TOMAHAWK, WI	WDNR	3751	MANUFACTURES & COATS NON-METALLIC MOTORCYCLE PARTS	FOUR SPRAY BOOTHS; USE OF HVLP SPRAY; OPERATE PRESSURE SHALL BE LESS THAN 10 PSI; NO TYPES OF ADD-ON CONTROLS WERE FOUND TO BE FEASIBLE FOR VOC	RBLC
CARPENTER COMPANY	LATHROP, CA	SJUVAPCD	3086	PAINTING PLASTIC AUTOMOTIVE PARTS	THREE OF THE CONTROL DEVICES THAT WERE TECH. FEASIBLE(THERMAL INCIN.,CAT. INCIN., & CARBON ABSORPTION) WERE NOT COST EFFECTIVE. USE OF ADHESIVES WITH VOC CONTENT <1	RBLC

Table 2: Summary of BACT Determinations for Similar Surface Coating Facilities (Continued)

SOURCE	LOCATION	REGULATORY AUTHORITY	SIC	AFFECTED FACILITY	BACT DETERMINATION	REFERENCE
HOLZ RUBBER COMPANY, INC.	LODI, CA	SJUVAPCD	3069	COATING OF PLASTIC/RUBBER	BRUSH APPLICATION OF ADHESIVES. USING ADHESIVES WITH A VOC CONTENT OF 7 LB/GAL OR LESS.	RBLC
DELTA PLASTICS	STOCKTON, CA	SJUVAPCD	3479	COUNTERTOP MANUFACTURING	SPRAYERS, APPLICATION OF CONTACT ADHESIVES. USING ADHESIVES WITH A VOC CONTENT OF 540G/L OR LESS.	RBLC